CONTENTS OF SUPPLEMENT.

PERSONAL 61
Obituary 61
ENGINEERING SOCIETIES 61
Coming Meetings 61
NEW PUBLICATIONS 61
Trade Publications 62
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 62
Railways 62
Street and Electric Railways 62
Electric Light and Power 63
Bridges 63
Buildings 63
Water-Works 64
Sewerage 65
Garbage Disposal and Street Cleaning 66
Contract Prices 66, 67, 68
Streets and Roads 66
Manufacturing Plants 67
Miscellaneous Contracts 68
U. S. Tropical Possessions 68
Foreign Contracts and Export News 68
INDUSTRIAL NOTES 68

PERSONAL.

Mr. R. R. Bradley has been appointed Mechanical Engineer of the Chicago, Milwaukee & St. Paul Ry.

Mr. Dean Clark has been appointed Assistant Engineer of the New York Shipbuilding Co., of Camden, N. J.

Mr. D. B. Shirk has been appointed Superintendent and Engineer of the Elizabethtown Water Co., of Elizabethtown, Pa.

Mr. A. R. Raymer has been appointed Chief Engineer of the Pittsburg & Lake Erie R. R., with headquarters at Pittsburg, Pa.

Mr. George H. Boughman has been appointed Chief Engineer of the Surveying Department of the city of Wilmington, Del.

Mr. William Gavin Taylor, who for the past year has been Acting City Engineer of Medford, Mass., has been appointed City Engineer.

Mr. John R. Day, President of the St. Louis & Belleville Electric Ry. of St. Louis, Mo., has resigned and is succeeded by Mr. George J. Kobusch.

Mr. M. A. Naville has been appointed Assistant Engineer of Maintenance of Way of the Peoria & Eastern Ry., to succeed Mr. C. S. Millard, resigned.

Mr. E. A. Burrill has been appointed Superintendent of the Illinois Southern R. R., with headquarters at Sparta, Ill., to succeed the late Mr. H. W. Schmidt.

Mr. H. F. Norton has been appointed Chief Engineer of the Technical Staff of the Newport News Shipbuilding & Dry Dock Co.'s yards, at Newport News, Va.

Mr. E. A. McFarland has been appointed Chief Engineer of the Railway Department of the Cananea Consolidated Copper Co., with headquarters at La Cananea, Sonora, Mex.

Mr. H. M. Lofton, Manager of the Savannah, Thunderbolt & Isle of Hope Ry., of Savannah, Ga., has resigned to represent the Chicago Varnish Co., with headquarters at Atlanta, Ga.

Mr. Allan L. McDermott, of Jersey City, N. J., has been elected President of the Washington Traction & Electric Co., of Washington, D. C., to succeed Mr. Frederick C. Stevens, resigned.

Mr. Charles Millard, Engineer of Maintenance of Way of the Peoria & Eastern Ry., has resigned to accept a similar position with the Delaware, Lackawanna & Western R. R., in New York city.

Mr. Hubert V. Carpenter, formerly Assistant in Physics at the University of Illinois, has been appointed Professor of Physics and Electrical Engineering at the Washington State College of Agriculture, Pullman, Wash.

Mr. Angus Brown, formerly Superintendent of Motive Power of the Wisconsin Central Ry., has been appointed Superintendent of Motive Power of the Chicago Terminal Transfer R. R., with headquarters at Chicago.

Mr. Palmer C. Ricketts, M. Am. Soc. C. E., and Director of the Rensselaer Polytechnic Institute, of Troy, N. Y., was elected President and Trustee of the Institute on Feb. 19, to succeed Hon. J. H. Peck, resigned.

Professor J. D. Harper, of the Mechanical Engineering Department of the Kansas Agricultural College at Manhattan, Kan., has resigned to accept a position on the Engineering Staff of Fairbanks, Morse & Co., at Beloit, Wis.

Hon. Charles A. Prouty, member of the Interstate Commerce Commission, delivered an address before the engineering students of Purdue University, at Lafayette, Ind., on Jan. 21, on "The Relation of the Railways to the People."

Mr. W. B. Worthington, Chief Engineer of the Lancashire & Yorkshire Ry., of Manchester, England, and Mr. J. T. Tatlow, also of that company, are in this country for the purpose of studying the American railways and electric railway systems.

Mr. Harvey M. Littell, President of the American St. Ry. Association in 1896, and previously with the New Orleans Traction Co., has been elected General Manager of the Barr Contracting & Construction Co., with office at 30 Broad St., New York.

Mr. P. W. Henry, Assoc. M. Am. Soc. C. E., Vice-President and General Manager of the Barber Asphalt Paving Co., delivered an address before the students of the Rensselaer Polytechnic Institute, at Troy, N. Y., on Feb. 15, his subject being a "Sketch of the Asphalt Paving Industry."

OBITUARY.

Mr. Augustus G. Stevens, Civil Engineer and Mill Architect, of Manchester, N. H., died in that city on Feb. 12, aged 70 years.

Mr. Waltstill H. Allis, of Springfield, Mass., one of the organizers of the Springfield St. Ry., died at his home in that city on Feb. 19.

Mr. George W. Howell, City Engineer of Morristown, N. J., and a member of the State Board of Education of New Jersey, died at his home in Morristown on Feb. 15.

Mr. M. M. Martin, Superintendent of the Car Department of the Wabash R. R., died at his home in Litchfield, Ill., on Feb. 12, aged 69 years. Mr. Martin was a member of the Master Car Builders' Association of the United States, and was the owner of the Litchfield Foundry & Machine Works.

Mr. Charles Du Bois, Contractor, and President and Treasurer of the Henry Du Bois Co., dredging contractors, died in Brooklyn, N. Y., on Feb. 17, aged 63 years. Mr. Du Bois had been long connected with the Morris & Cuming Dredging Co. and the Pratt Manufacturing Co., and was Vice-President and a Director of the Dredge Owners' Association.

Mr. Charles F. de Velasco, New England Representative of the National Tube Co., died at his home in Jamaica Plain, Mass., on Feb. 12. Mr. de Velasco was born at Cold Springs, N. Y., in 1851, and in 1869 entered the employ of the National Tube Works Co., then located in East Boston, with which company he was connected until his death. He was also identified with the American Tube Co.

Col. Peter S. Michie, Professor of Natural and Experimental Philosophy at the United States Military Academy, died at West Point, N. Y., on Feb. 16 of pneumonia. Col. Michie was the Dean of the Academic Board at the Military Academy, and had been on duty as Professor of Philosophy for 30 years. He was born in Scotland about 63 years ago. He entered the Military Academy as a cadet from Ohio in 1859, and graduated in 1863. He was appointed to the Corps of Engineers and served in the operations against Charleston in 1863 and 1864. Col. Michie was the author of a number of scientific works and a member of the Board of Overseers of the Thayer School of Civil Engineering, Dartmouth College.

Col. Edgar L. Lambert, a Civil Engineer and Civil War veteran, died in New Orleans on Feb. 13, aged 63 years. Col. Lambert was born in Alexandria, Va., and was a graduate of the U. S. Naval Academy. He entered the Confederate Army at the outbreak of the war and became Lt. Col. of the 10th Va. Regt. As the result of a very severe wound he was invalided for nearly a year, and he then entered the Confederate Navy and commanded the "Tuscaloosa" and "Selma" in the battle of Mobile Bay. At the close of the Civil War he went to Mexico and was an officer in the army of Maximilian. He assisted in the building of the Mexico-Vera Cruz Railway, and after a considerable time spent in France, he was engaged as an engineer on the Texas & Pacific, the Missouri, Kansas & Texas and other Western railways. Since 1893 he has been in the employ of the City Engineer of New Orleans, in connection with the new sewerage and drainage projects.

ENGINEERING SOCIETIES.

COMING MEETINGS.

DOMINION AND ONTARIO LAND SURVEYORS.
Feb. 26 to 28. Annual meeting at Toronto, Ont. Secy., Major Sankey, City Hall, Toronto, Ont.

FRANKLIN INSTITUTE.
Feb. 28. Meeting of the Chemical Section. Paper: "The Chemical Work of the United States Geological Survey," by Mr. F. W. Clarke. Secy., Wm. H. Wahl, 15 South 7th St., Philadelphia, Pa.

ENGINEERS' CLUB OF COLUMBUS.
March 2. Paper: "Sewer Maintenance in Columbus," by G. W. Lilly. Secy., H. M. Gates, 12½ North High St., Columbus, O.

LAKE SUPERIOR MINING INSTITUTE.
March 5 to 8. Annual meeting at Houghton, Mich. Secy., F. W. Sperr, Michigan College of Mines, Houghton, Mich.

AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION.
March 12 to 14. Annual meeting in Chicago, Ill. Secy., L. C. Fritch, Monadnock Block, Chicago, Ill.

NORTHWESTERN RAILWAY CLUB.—At the regular meeting of the club in Minneapolis, on Feb. 13, a discussion was held on the subject, "Electric Traction for Heavy Railway Service." A paper also was read by Mr. Jas. Casey on "Lubrication of Locomotive Valves and Cylinders," and one on "The Principles of the Dynamo," by Prof. Geo. D. Shepardson.

ENGINEERS' CLUB OF TORONTO.—At the annual meeting of the club, held on Jan. 8, the following officers were elected: President, A. T. Hertzberg; Vice-President, H. A. Gray; Secretary, Willis Chipman; Treasurer, C. M. Caniff; Directors, T. R. Rosebrugh, James McDougall and Cecil B. Smith. After the election a discussion was held on the topic, "What Are the Essential Qualities to be Required in a Specification for Portland Cement?"

WESTERN SOCIETY OF ENGINEERS.—At a meeting held in the Art Institute, Chicago, on Feb. 13, a paper by Mr. T. T. Johnston, on "The Chicago River," was read by the Secretary, in the author's absence. Mr. Johnston has been in charge of investigations as to the capacity and flow of the river from 1886 until his resignation from the position of assistant chief engineer of the Drainage Board, a few years ago. His paper was a very thorough explanation of the discharge capacity of the different portions of the river under different conditions. He thought the sanitary features of paramount importance, with navigation coming next, but questioned the advisability of lowering the tunnels, as this will simply lead to vessels being loaded to a draft too deep for the river as a whole. To give the maximum flow for dry weather conditions he proposed a conduit from the lake to the river under 18th St., so that the river above 18th St. would not have to be enlarged to provide for this flow.

The discussion developed several objections on the part of the engineers of the Sanitary District to the figures and suggestions given in the paper. Mr. Isham Randolph and Mr. Ernest L. Cooley dissented from Mr. Johnston's views, while Mr. James A. Seddon endorsed them. Gen. Wm. Sooy Smith brought up the old question of establishing a new harbor on the lake front, claiming that the Chicago River can never be made satisfactory for the use of large vessels. The objections to the 18th St. conduit, proposed in the paper, were largely based upon the present tendency to regard the Drainage Canal as part of a future inland waterway rather than as primarily a means for the disposal of Chicago's sewage and for improving its source of water supply. The general subject will probably be further discussed at another meeting of the society.

NEW ENGLAND WATER-WORKS ASSOCIATION.—The February meeting of this association was held at Young's Hotel, Boston, on Wednesday afternoon, Feb. 13, 1901. About 85 members and guests were present. Mr. Wm. R. Groce, Superintendent of the water-works of Rockland, Mass., called attention to a bill now before the Massachusetts legislature, providing that unpaid water rates (due to a city or town) shall be a lien on the estate, and urged all who are interested to attend the hearing before a committee and present arguments for or against the measure.

Prof. Wm. T. Sedgwick, of the Massachusetts Institute of Technology, presented a very interesting review of "The Rise and Development of Water Supply Sanitation in the Nineteenth Century." He showed that up to the middle of the century no places took the pains to secure sanitary water supplies, and so eminent an engineer as Chesbrough advised Lowell and Lawrence to take water from the polluted Merrimac, and Chicago to drink the water of Lake Michigan, containing its own filth. Water supply as a carrier of disease was first made prominent by the famous cholera epidemic of the Broad St. pump, London, which was so admirably exposed by Dr. John Snow, in 1854. The epidemics of Lausen, Switzerland; Pylmouth, Pa.; Lowell and Lawrence, Mass.; Hamburg, Germany, were briefly mentioned.

Prof. W. M. Davis, of Harvard College, followed with a talk on "The Causes of Rainfall." It is well known that the source of all our rain is the water vapor in the atmosphere, but the fact that much of this vapor arises from evaporation from land surfaces is frequently overlooked. Prof. W. H. Niles, of the Massachusetts Institute of Technology opened the discussion, in the course of which Professor Davis asked for the results of experience with the divining rod. Mr. Charles K. Walker, Superintendent of the water-works of Manchester, N. H., mentioned two cases near his city where, after failure to strike water, a seer was called who found water at once with the rod. Mr. Sidney Smith stated that Charles Lattimer, when chief engineer of one of the western railroads, was very successful in locating water supplies for the locomotives by this means, in which he was a firm believer.

Discussion on the subject of "Charges for Private Fire Service" was opened by Mr. J. C. Hammond, Jr., of Rockville, Conn. The supply which is in his charge is owned by ten mills, but is also used for domestic supply. The problem of equitably dividing expenses among the mills for benefits received he had not been able to solve in a satisfactory manner. Three methods of charging for sprinkler protection were mentioned: (1) On the basis of floor area protected; (2) on the basis of the number of sprinkler heads; (3) on the amount of insurance carried. Each of these methods is open to objections. Mr. C. K. Walker, of Manchester, expressed a belief that mills should pay for such protection. He would also prefer to have fire services metered, to prevent mills from stealing water. Mr. Edward V. French presented many arguments in favor of free connections to sprinkler pipes, and the intention of the underwriters that such pipes should not be used for any except fire purposes. On account of the lateness of the hour the further discussion of this topic was postponed until the next meeting.

NEW PUBLICATIONS.

REPORT OF THE SHELL-FISH COMMISSIONERS, State of Connecticut, for the year ending Sept. 30, 1900. Paper; 6 × 9 ins.; 59 + xvi., with maps. Address the Commission, Exchange Building, New Haven, Conn.

This publication is an interesting account of the work done by the "Nutmeg State" in fostering its oyster industry. About 64,000 acres of land under water within the jurisdiction of Connecticut are now owned by private parties and cultivated as oyster beds. The marking and preservation of boundaries between these tracts and the boundaries of the natural beds owned by the state, present some peculiar engineering difficulties which are described by the Engineer of the Commission, Mr. Charles H. Nichols, of New Haven.

PROCEEDINGS OF THE TENTH ANNUAL CONVENTION OF THE ASSOCIATION OF RAILWAY SUPERINTENDETS OF BRIDGES AND BUILDINGS, held in St. Louis, Mo., Oct. 16-17-18, 1900. S. F. Patterson, Secretary, Concord, N. H. Paper; 6 × 9 ins.; pp. 298; illustrated.

The matter discussed by the members of this association is indicated in the following list of papers presented: The Education of Railroad Men for Subordinate Positions

of Responsibility, etc., by Walter G. Berg, Chief Engineer, Lehigh Valley R. R.; Duties and Responsibilities of the Superintendents of Bridges and Buildings, by Onward Bates, M. Am. Soc. C. E. Committees also reported upon the following subjects: Economical painting of railway bridges and buildings; life of different kinds of bridge timber; construction and maintenance of highway and farm crossings; sanitary arrangements in local stations unprovided with water or sewage systems; pumping plants at water stations; tool equipment of a gang of bridgemen; stationary and portable snow fences; fire prevention in railway buildings; repairs to metal and wooden bridges, without falseworks; track scales; concrete as used for piers, abutments and culverts; comparison of actual cost of hand and air-riveting in the field; cheap bumper for yard terminals; the merits or demerits of tie-plates on bridges. A report of the proceedings was published in our issue of Oct. 25, p. 287.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3¾x6 ins., 6x9 ins., and 9x12 ins.)

ALTERNATING CURRENT MOTORS.—The Emerson Electric Mfg. Co., St. Louis, Mo. Paper; 5 × 7 ins.; pp. 48; illustrated.

This is a collection of testimonials endorsing single-phase alternating-current motors manufactured by the above company.

ROLLER BEARINGS.—The Standard Roller Bearing Co., 2324 Market St., Philadelphia, Pa. Paper; 6 × 4 ins.; pp. 68; illustrated.

This catalogue describes roller bearings especially designed for use on the axles of vehicles, and also ball thrust bearings.

ACETYLENE GAS GENERATORS.—Power Specialty Co., 126 Liberty St., New York city. Paper; 8½ × 6 ins.; pp. 30; illustrated.

The generators herein described are of the non-automatic type in which the carbide is fed into water in small quantities by hand. A holder is provided to store the gas required for one or more days' operation. The advantages claimed for this system are cheapness, simplicity and safety.

STEAM JETS AND SHAKING GRATES.—Dobbie Foundry & Machine Co., Niagara Falls, N. Y. Paper; 9 × 6 ins.; pp. 93; illustrated.

The shaking grate here described is so arranged that by operating a lever alternate grate bars may be raised and lowered. The steam jet is valuable for preventing the production of smoke. An automatic arrangement is provided that turns the steam jet on for a short period each time the furnace door is opened.

ROLLING-LIFT DRAWBRIDGES.—The Scherzer Rolling Lift Bridge Co., 1616 Monadnock Block, Chicago, Ill. Cloth, oblong; 14 × 11 ins.; pp. 68; illustrated (with line engravings and 23 full-page half tones). $10.

This book presents a discussion of drawbridges of the fixed-center bascule, the rolling-lift bascule and the swing types, and while it is of course not an unbiased or impartial discussion, it contains much interesting material. A number of bridges of these types are described and illustrated, including the proposed eight-track swing bridge over the Drainage Canal, the plans for which were re-jected in favor of the Scherzer rolling-lift type. There is also a design for an "artistic" bridge of this type over the Chicago River. Plans and descriptions are given of a number of railway and highway rolling-lift bridges built at Chicago, Cleveland and Boston, some having single leaves, but the majority having double leaves. Several of these bridges have been described and illustrated in our columns. A comparison is also drawn between the methods of crossing a navigable stream by a tunnel, by a high-level fixed bridge, or by a low-level bridge with draw span. Other miscellaneous matter includes the Chicago harbor project recently noted in our columns, and a project for a deep waterway, available for the largest vessels, from Chicago to the Gulf by way of the Mississippi River. The book is well printed and profusely illustrated.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Feb. 21.	Straightening River,	Utica, N. Y.	Jan. 31
	Advertised, Eng. News, Jan. 31 to Feb. 14.		
Feb. 23.	Earth dam,	Amsterdam, N. Y.	Feb. 7
	Advertised, Eng. News, Feb. 7 to 21.		
Feb. 23.	County roads (6½ miles),	Batavia, O.	Feb. 21
Feb. 25.	Water-works,	Fort Du Pont, Del.	Feb. 7
	Advertised, Eng. News, Feb. 7 to 28.		
Feb. 25.	School house,	Birmingham, Ala.	Feb. 7
Feb. 25.	School house,	Cleveland, O.	Jan. 31
Feb. 25.	Breakwater superstructure,	Buffalo, N.Y.	Jan. 31
	Advertised, Eng. News, Jan. 31 to Feb. 21.		
Feb. 25.	Repairing asphalt,	Augusta, Ga.	Feb.14
	Advertised, Engineering News, Feb. 14.		
Feb. 25.	Bridge approaches,	Boston, Mass.	Feb. 14
Feb. 25.	Water pipe and castings,	Los Angeles, Cal.	Feb. 21
Feb. 25.	Paving (11,800 yds.),	Bellevue, Pa.	Feb. 21
Feb. 26.	Water-works,	Laurel, Miss.	Jan. 31
	Advertised, Eng. News, Jan. 31 and Feb. 7.		
Feb. 26.	Hospital buildings,	Alexandria, Va.	Feb. 7
Feb. 26.	Sewerage system,	Xenia, O.	Feb. 7
Feb. 27.	Block paving,	Hoboken, N. J.	Feb. 7
Feb. 27.	Iron bridges,	Quebec, Que.	Feb. 11
Feb. 27.	Cleaning streets,	Cleveland, O.	Feb. 14
Feb. 27.	Heating plant,	New York, N. Y.	Feb. 21
Feb. 27.	Paving,	Tampa, Fla.	Feb. 21
Feb. 27.	School house,	Billerica, Mass.	Feb. 21
Feb. 27.	Sewer,	Hartford, Conn.	Feb. 21
Feb. 27.	Paving,	Buffalo, N. Y.	Feb. 21
Feb. 28.	Raising garbage crematory,	New York	Feb. 21
Feb. 28.	Road roller,	Brantford, Ont.	Feb. 21
Feb. 28.	Park supplies,	New York, N. Y.	Feb. 21
Feb. 28.	Pipe, hydrants, meters, etc.,	St. Paul	Feb. 21
Feb. 28.	Hospital building,	Fort Keogh, Mont.	Feb. 21
Feb. 28.	School house,	Wichita, Kan.	Feb. 21
Feb. 28.	Water-works, etc.,	Mackinac Island, Mich.	Feb. 14
Feb. 28.	Sewers,	Cincinnati, O.	Feb. 14
Feb. 28.	Sewerage system, etc.,	Mackinac Isld,	Feb. 14
Feb. 28.	Electric plant, etc.,	Mackinac Isld, Mich.	Feb. 14
Feb. 28.	Dredging,	Newport, R. I.	Jan. 31
	Advertised, Eng. News, Jan. 31 to Feb. 21.		
Feb. 28.	Hydraulic dredge,	Galveston, Tex.	Jan. 31
	Advertised, Eng. News, Jan. 31 to Feb. 21.		
Feb. 28.	Observation tower,	Wilmington, N. C.	Jan. 31
	Advertised, Eng. News, Jan. 31 to Feb. 21.		
Feb. 28.	Brick paving (8,000 ft.),	Alexandria, La.	Feb. 7
	Advertised, Eng. News, Feb. 7 to 21.		
Mar. 1.	Equipment (mfg. plants),	Lynchburg, Va.	Jan. 17
Mar. 1.	Plans for dormitory,	Athens, Ga.	Jan. 17
Mar. 1.	Steel bridge,	Peshtigo, Wis.	Jan. 17
Mar. 1.	Steel bridge,	Winnipeg, Man.	Jan. 31
Mar. 1.	Electric machinery,	West Chester, Pa.	Jan. 31
Mar. 1.	Electric machinery,	Jackson, Tenn.	Jan. 31
Mar. 1.	Foundations for building,	Annapolis, Md.	Feb. 7
Mar. 1.	Bridge superstructure,	Easton, Pa.	Feb. 14
Mar. 1.	Boilers (2),	(W.-W.), Kansas City, Mo.	Feb. 14
	Advertised, Eng. News, Feb. 14 and 21.		
Mar. 1.	Bridges (3),	Indianapolis, Ind.	Feb. 14
Mar. 1.	Wharf and beach protection,	Ottawa, Ont.	Feb. 21
Mar. 1.	Rock crusher and road roller,	Vancouver.	Feb. 21
Mar. 1.	School house,	Birmingham, Ala.	Feb. 21
Mar. 1.	Warehouse,	Pittsburg, Pa.	Feb. 21
No date.	Masonry dam,	Waterbury, Conn.	Jan. 10
	Advertised, Eng. News, Jan. 10 to Feb. 7.		
No date.	Electric railway (20 miles),	Fincastle, Va.	Feb. 14
No date.	Macadam paving (20,000 yds.),	Sumter, S.C.	Feb. 21
No date.	Electric plant,	Austin, Tex.	Feb. 21
No date.	Electric plant,	Live Oak, Fla.	Feb. 21
No date.	Coal discharging plant,	Londonderry, Ire.	Feb. 21
No date.	Electric haulage plant,	Cardiff, Wales	Feb. 21
No date.	Railway (113 miles),	(I. & G. N.), Tex.	Feb. 21
	Advertised, Eng. News, Feb. 21-28, March 7.		
No date.	Ice plant,	Philadelphia, Pa.	Feb. 21
No date.	Reservoir work,	California, O.	Feb. 21
	Advertised, Eng. News, Feb. 21 and 28.		

RAILWAYS.

CADIZ R. R.—P. Armitage, Ch. Engr., Cadiz, Ky., informs us that a charter for this recently organized road has been applied for, and that the construction of the line will be started as soon as a location survey is made. The necessary funds have been secured. The road will extend from Cadiz to a point on the Illinois Central R. R., and also to a point on the Louisville & Nashville Ry., having a total length of about 10 miles. J. D. Shaw and R. R. McKee, Cadiz, and B. Armitage, Philadelphia, Pa.

CANADIAN PACIFIC.—Reports state that this company has constructed during the year ending Dec. 31 last, nine different branch lines, aggregating about 139 miles of line, and has now under construction a tenth branch from West Selkirk to Lake Winnipeg, 26 miles. The following branch lines will be constructed, and are now either surveyed or being surveyed: From Lardo to Selkirk, B. C., 33 miles; from Front Lake to Ferguson, B. C., 5 miles; from Midway to Pretoria, B. C., 88 miles; from Okanagan Falls to Spence's Bridge, 191 miles. A survey is under way for a new line from the Pacific Coast eastward, from Abbottsford via Chilliwack to the line of the Columbia & Western Ry. W. F. Tye, Ch. Engr. of Construction, Winnipeg, Man.

CHELAN TRANSPORTATION & SMELTING CO.—It is stated that arrangements have been completed for the building of a railway from the head of Lake Chelan to the Horseshoe Basin and Bridge Creek districts, in Washington. The road will traverse an ore district and will be about 25 miles in length. Rufus D. Johnson, Gen. Mgr., Jamieson Bldg., Spokane, Wash., states that work will be started in the spring and pushed all summer, so that rails may be laid the following spring.

CHOCTAW, OKLAHOMA & GULF.—J. M. Pace, tie contractor, of Ola, Ark., has received a contract for furnishing all the piling to be used on the proposed extensions of this road, about 100,000 ft. of which will be furnished in the next four months.

CHOCTAW, OKLAHOMA & GULF.—Sub-contracts for the extension of this line into Ardmore, Ind. Ter., have been awarded as follows: L. W. Robinson, three miles; Rust & Smith, five miles; P. J. Murray, four miles; Griggsby Construction Co., 19 miles; P. H. Rogers, 8 miles; J. W. Powell, 14 miles; W. A. Shippey, 16 miles. Contractors are now looking over the remaining gaps and will bid on the work this week. All of the work must be finished within a year. Bids are being prepared for masonry work and for tracklaying. No contracts for this work have as yet been awarded. F. A. Molitor, Ch. Engr., Little Rock, Ark.

COLUMBUS NORTHWESTERN.—The construction of this line, running from Peoria, O., to St. Mary's, about 66 miles, has been completed by W. B. Strang, Jr., 15 Wall St., New York. The property was purchased by Mr. Strang, on Sept. 21, 1900, and later sold by him to the Toledo & Ohio Central R. R., for the sum of $1,000,000, of which $75,000 is to be expended in equipment, the conditions of the sale being that Mr. Strang should complete and put the property in operation.

DELAWARE, LACKAWANNA & WESTERN.—The citizens of Danville, N. Y., has asked the company to purchase the Dansville & Mount Morris road and build an extension from Dansville to Perkinsville to connect with the main line. The grade between those towns is reported very heavy.

GRAND RIVER, CASTLETON & LA SAL MOUNTAIN.—Incorporated in Utah with $1,000,000 capital stock to build a railway from Grand River to La Sal Mountain, some 20 miles distant. Geo. S. Mattison, Seth E. McLean and Chas. F. Caswell, are interested.

INTERNATIONAL & GREAT NORTHERN.—Bids are wanted by this company for building an extension of 113 miles, as stated in our advertising columns. The accepted contractor may be given the refusal of 90 miles additional. J. D. Trammell, Ch. Engr., Palestine, Tex.

JARVISVILLE & TEN MILE.—A charter for this road has been asked in West Virginia for the purpose of building a railway from Jarvisville to Sardis, on the West Virginia Short Line R. R. Dr. T. M. Hood, Clarksburg; O. S. McKinney, Fairmont, W. Va., and D. O. Morgan, Big Buffalo, are interested.

JONESBORO, LAKE CITY & EASTERN.—This company has filed an amendment to its charter in Arkansas, providing for an extension of the road from Manila to Blytheville, that state, about 20 miles, and increasing its capital stock to cover the cost of the same. A. J. Kerfoot, Gen. Mgr., Jonesboro, Ark.

NASHVILLE, CHATTANOOGA & ST. LOUIS.—Hunter McDonald, Ch. Engr., Nashville, Tenn., writes us that work is already in progress on some six or seven miles of spur lines.

NEW YORK CENTRAL & HUDSON RIVER.—The American Bridge Co., 100 Broadway, New York, has been awarded the contract for about 28,000 tons of bridge steel, to be used in the reconstruction of some 150 bridges on the company's line.

NEW YORK & LONG BRANCH.—R. Blodgett, Supt., Long Branch, N. J., is reported as stating that extensive alterations and improvements will be made to the company's roadbed and equipment. The improvements will include the elimination of all grade crossings, the tracks being raised where necessary, the straightening of the curves at Matawan, Long Branch, Elberon and other places, the rebuilding of the drawbridge over the Raritan River at Perth Amboy, making it a double track structure, the replacing of all wooden bridges by substantial steel structures, and the relaying of the roadbed. It is proposed to begin work on the bridges soon after the close of the summer's business. The improvements will cost about $2,000,000.

NORTH CAROLINA.—The United States Colliery, Steel & Iron Co., Ltd., with a capital stock of $5,000,000, has been organized in Greensboro, N. C., to mine iron and coal and build railways in Stokes and adjoining counties, which will tap the Southern Ry. J. W. Hazell, J. H. Foss, Baltimore, Md., and L. A. Carr, Dunham, N. C., are interested.

PEORIA & NORTHWESTERN.—It is said that Winston Bros., contractors, of Minneapolis, Minn., who have the contract for building this road, 185 miles in length, will sublet different sections of the road, work to begin at once. J. W. Creany, of that firm, who will have charge of the work, was recently at Hotel Fey, Peoria, Ill.

PERRY COUNTY.—It is stated than an extension will soon be build by this road through Saville township, Pa., up Liberty Valley, to connect with a line to be built by T. S. Morehead, which will be used to convey the product of his phosphate fields and timber. Surveys will be started as soon as the weather is favorable. The line will be eventually extended into Fulton county to a connection with the proposed road from McConnellsburg to Hancock, Md. D. B. Milliken, Vice-Pres., New Bloomfield, Pa.

QUEEN ANNE'S.—The contract for building the extension of the road from Love Point, via Queenstown and Centreville, Md., about 14 miles, has been let to Wade, Sloan & Co., Baltimore, and work will be started at once, to be finished by May 20. New piers are to be built at Love Point, Md., and Lewes, Del., and will be constructed by Sanford & Brooks. The entire cost of the improvements, including the purchase of new rolling stock, will be about $330,000.

RUMFORD FALLS & RANGELEY LAKES.—It is reported that an extension of this road will be made to Haines Landing, Me., in the spring, which will give the road access to the heart of the Lake region and a valuable tract of timber land. An extension to Megantic is also probable. W. Pettengill, Gen. Mgr., Rumford Falls.

ST LOUIS & SOUTHERN ILLINOIS.—Incorporated in Illinois, with a capital stock of $50,000, to build a railway from East St. Louis, Ill., through St. Clair and Monroe counties to Moro Landing, on the Mississippi River, thence to Missouri Junction, Ill. The principal office will be in Chicago. Bluford Wilson and James L. Cook, Springfield, and John W. Walsh, Chicago, are interested.

WASHINGTON & OREGON.—A petition has been filed in the Superior Court of Clark county by the promoters of this company asking that condemnation proceedings be instituted for the acquisition of the right of way for the company's proposed line from Portland, Wash., to Seattle. A survey of the right of way sought has been completed. Edmund Rice, Secy., and E. H. Gine, Attorney.

WHITE RIVER.—Incorporated in Arkansas, with a capital stock of $1,950,000, to build a railway from Batesville in a northwesterly direction through Izard and Marion counties, to the state line, at a point south of Springfield, Mo., having a total length of 130 miles. The road will be built at once, according to reports, the survey having been completed some time ago. It will penetrate the rich zinc region of northern Arkansas. Geo. J. Gould, New York city, is the principal owner.

STREET AND ELECTRIC RAILWAYS.

NEW BEDFORD, MASS.—E. S. Wilde, New Bedford, informs us that the contract for the tracklaying on the company's road of 22 miles, has been let to H. Gore & Co., Boston, and E. H. Kitfield, 53 State St., Boston, has received the award for the power house and car station. The locations are made. A. B. Drake, Ch. Engr.

PITTSFIELD, MASS.—R. D. Gillette, temporary Treas. and Secy., Berkshire St. Ry., Pittsfield, writes us that the proposed road will be about 52 miles in length, and will run from Adams through Cheshire, Lanesboro, Lenox, Lee, Stockbridge, Great Barrington, Sheffield and this city. Petitions for locations have been filed and subscriptions for bonds completed.

SCHENECTADY, N. Y.—The Schenectady St. Ry. Co. proposes to extend its line in this city. R. H. Fraser, Vice-Pres. and Mgr.

ALLENTOWN, PA.—The Willow Grove & Doylestown Ry. has filed plans for an extension of their road from Doylestown to Perkasie, via the villages of Fountainville, Dublin, Blooming Glen and Silverdale. Connection will be made at Perkasie with the Inland Traction & Quakertown companies, and will give a through line from this city to Philadelphia. Geo. D. Widener, Pres., Philadelphia.

SOUTH BETHLEHEM, PA.—Local papers state that a charter has been granted to the Lehigh & Carbon St. R. R., which proposes to build from Allentown to Lehigh Gap, about 20 miles, passing through several towns. The rights of way are mostly secured and the construction will be started in the early spring. J. J. Heintzelman, Pres.; Mark T. Swartz, Treas.

CHESTERTOWN, MD.—The charter of the old Chestertown Light, Power & Ry. Co. has been transferred to the new compnay of that name, and it is said that work will soon be started on the projected road. Henry W. Catlin, Secy., Chestertown.

CUMBERLAND, MD.—The county commissioners have granted the Penn State Construction Co. a franchise to build an electric road over the county roads from Cumberland to Lonaconing. The work on the line must be started within 90 days and the line finished inside of a year. The successful bidders for the franchise have incorporated the Frostburg, Eckhart & Cumberland Electric Ry. and the Lonaconing, Midland & Frostburg Electric Ry. to build the road, as the law of the state does not permit one company to build over 20 miles of road. Another company is yet to be incorporated to build the line from Lonaconing to Westernport. Each of the lines will cost in the neighborhood of $150,000. John W. Burchinal and James E. Hooten, Moundsville, are the original promoters; Joseph MacCarroll, Pres., Penn State Construction Co., Philadelphia, is now in control.

CHARLOTTE, N. C.—The New River Development Co., which controls considerable ore properties in this state, has applied for incorporation to mine its properties, build railways, electric railways, telegraph and telephone systems, and to manufacture steel. Richard Wood, R. B. Roane and W. C. Fields are interested.

RALEIGH, N. C.—The Durham Traction Co. has been incorporated with a capital stock of $1,000,000 for the purpose of building a system of street railways from East to West Durham, and from North Durham to the city cemetery. The company also proposes to establish an electric lighting and power plant. R. H. Wright, Pres.; J. S. Carr, Vice-Pres.; J. S. Manning, Secy.

COLUMBUS, O.—The Columbus, Findlay & Toledo Electric Power, Fuel & Light Ry. Co., with headquarters at La Rue, has been incorporated with a capital stock of $10,000, for the purpose of building a line from Findlay through Hancock, Hardin, Wyandot, Marion, Union and Delaware counties to Columbus. A. J. Jones, J. H. Leonard and R. M. McVey are incorporators.——The Findlay & North Baltimore Ry. Co. has been incorporated to build an electric road between those towns, Wood county. Capital stock, $150,000.——The Elyria, Grafton & Southern

Ry. Co. has been incorporated by S. B. Day, I. D. Faxson, Geo. H. Chamberlain, to build and operate a line from Elyria to Grafton.——The Tiffin & Southwestern R. R. was recently incorporated to build a line from Tiffin through Kenton and Upper Sandusky to Wapakoneta, with a branch to Lewiston reservoir. The company is capitalized at $50,000.

BEDFORD, IND.—The council has granted a franchise to Bedford St. Ry. Co. for a street car line in this city, work to be started as soon as the weather permits. J. E. Boruff is interested.

INDIANAPOLIS, IND.—The Lafayette, Purdue & Northern Traction Co. has been incorporated, with $800,000 capital stock, by James R. Rock, A. A. Purman, W. R. Brown and others.——The county commissioners have granted a franchise to the Western Indiana Traction Co. to build an electric line over the Rockville road, to begin work this year and complete the road by October, 1902. The line will extend to Danville, extending ultimately to Crawfordsville. Floyd A. Woods, Fred. Joss and C. J. Clark are interested.

INDIANAPOLIS, IND.—Reports state that the Indianapolis, Greenwood & Franklin Electric R. R. is to be extended to Knightstown. Bonds for the construction have been floated, and work will be started by March 1 and finished by May. L. Hege, Ch. Engr., Lemcke Bldg.

MENASHA, WIS.—W. W. Reid, Engr., Menasha, informs us that surveys have been made for an electric railway from Manitowoc to Michicott, via Two Rivers, which will be run as far as Green Bay, by way of Cooperstown. Franchises for the line have been secured in the cities of Manitowoc and Two Rivers, and rights of way and franchises are secured through the townships of Manitowoc and Two Rivers. The line will be about 42 miles long. The company has not yet been incorporated. Thos. Higgins, Pres., Neenah.

MILWAUKEE, WIS.—The Milwaukee, Burlington & Lake Geneva Ry. Co. has been incorporated, with a capital stock of $100,000, to build an electric railway to connect several of the southern Wisconsin summer resorts with this city, to have a total length of about 50 miles. Electric engines with storage batteries will be used. Thos. W. Wheeler and I. N. Bick, Toledo, O., and J. L. O'Conner, Milwaukee, are interested.

PLYMOUTH, WIS.—Application for a franchise for a street railway in this place has been made by J. M. Salmann, Sheboygan, and P. P. Brickbauer.

SUPERIOR, WIS.—A company will soon be organized with $5,000, which will subsequently be increased to $100,000, for the purpose of building an electric road between Paris and Clinton. H. H. Knipe, Marshall, and O. V. Meyers, Newman, are interested.

IOLA, KAN.—The city has granted a franchise to F. V. Crouch, Carrollton, Mo., for an electric line between La Harpe, Gas City and Iola, for which surveys have been made. Work will proceed at once. Burns & McDonnell, Engrs., Postal Telegraph Bldg., Kansas City, Mo.

OMAHA, NEB.—The power house of the Omaha St. Ry. in this city was recently destroyed by fire; loss, estimated at $135,000.

ELECTRIC LIGHT AND POWER.

FORT WILLIAMS, ME.—Bids are asked until March 11 for erecting an electric plant here. Maj. S. W. Roessler, U. S. Engr., 537 Congress St., Portland.

YORK, ME.—Reports state that this city has applied to the legislature for permission to erect a municipal plant.

BELLOWS FALLS, VT.—George A. Weston, J. C. Day, J. T. Moore, E. C. Fairbank and H. D. Ryder have been appointed a committee to look into the question of erecting a municipal plant.

AMSTERDAM, N. Y.—It is said that the Montgomery County Power Co. has applied to the council for a franchise to erect a plant. Address General Manager Reed.

MIDDLETOWN, N. Y.—The council is said to have granted the Consumers' Light & Power Co. a franchise to erect a plant. J. B. Hulett, E. Millen and W. H. Rogers are interested.

NEW YORK, N. Y.—The Manhattan Ry. Co., 195 Broadway, has filed plans for a 2-story brick building for storing power for the new third rail system, at Third Ave. and 161st St., to cost about $31,000. George H. Pegram, Ch. Engr.

SCHENECTADY, N. Y.—It is stated that the Niskayuna Power Co. will construct a dam in the Mohawk River, near the aqueduct, and erect a plant. E. E. Brown, Pres., New York.

CAMDEN, N. J.—Press reports state that the South Jersey Gas, Electric & Traction Co., recently incorporated, absorbing the Camden Lighting & Heating Co. and a number of other companies, will abandon its plants at Merchantville, Gloucester, Woodbury and Moorestown and erect a large power house on Cooper Creek, near this city.

CHATHAM, N. J.—The council is said to be considering the question of erecting a municipal plant, to cost about $15,000. Address Councilman E. L. Phillips.

CONSHOHOCKEN, PA.—We are informed that the Conshohocken Electric Light & Power Co. has let nearly all contracts for erecting its proposed plant, to have a capacity of 75 2,000-c. p. arc and 2,000 16-c. p. incandescent lights. M. B. Feldman Electric Co., Engrs., Land Title Bldg., Philadelphia.

NEW CASTLE, DEL.—C. E. Eckles, Cy. Clk., informs us that a bill will be introduced into the legislature, asking for permission to issue $60,000 in bonds for erecting a plant and water-works.

LAMBERTON, VA.—Reports state that a special election will be held March 1 to vote on the question of issuing bonds for erecting a plant.

SUFFOLK, VA.—Bids are asked until March 15 for lighting the streets and public buildings of this city, requiring about 30 1,200 c. p. arc and 50 32 c. p. incandescent lights. A franchise for commercial lighting will be granted to the successful bidder. W. N. McAnge, Chn.

RAVENSWOOD, W. VA.—The council is said to have appointed a committee to secure data relative to the erection of a plant.

WHEELING, W. VA.—A bill has been introduced into the legislature authorizing this city to erect a municipal plant.

CANTON, GA.—Press reports state that Capt. T. M. Brady will erect a plant.

DUBLIN, GA.—A special election will be held March 12 to vote on the question of issuing $25,000 in bonds for improving the municipal plant and water-works, etc.

FORT VALLEY, GA.—The Mayor writes us that the people will decide the question of erecting a plant or letting a contract to Gray & Crandall.

LIVE OAK, FLA.—Bids are asked by C. Y. Byrd for erecting a plant complete.

CLAYTON, ALA.—The legislature has passed a bill authorizing this city to issue bonds for erecting a plant and water-works.

ROANOKE, ALA.—A bill has been passed by the legislature authorizing this city to issue bonds for erecting a plant and water-works.

LEXINGTON, MISS.—We are informed that the Ice, Light & Water Co. will want bids until about April 1 for erecting a 100 K-W. plant. E. C. DeLang, Mgr.

COUSHATTA, LA.—Frank Pierson is said to be interested in a plan to erect a plant here.

DICKSON, TENN.—The council is said to be considering the question of issuing bonds for erecting a plant and water-works.

BEDFORD, IND.—J. R. Voirs, Secy., writes us that the plant of the Bedford Light, Heat & Power Co. is completed.

LUDINGTON, MICH.—Reports state that Justus S. Sterns has purchased the plant owned by Frank Tiler for $24,000 and will remove it next spring and extend it.

PORT AUSTIN, MICH.—Bids are asked until April 1 for furnishing one 500-light dynamo, 1,000 incandescent lamps and necessary wire for the proposed municipal plant. Address W. L. Larned.

DANVILLE, ILL.—W. M. Tobey writes us that no steps have yet been taken toward the erection of the proposed plant for the Citizens' Electric Light, Heat & Power Co.

LINCOLN, ILL.—Press reports state that the council of this city is considering the question of issuing bonds for erecting a municipal plant.

MENASHA, WIS.—J. P. Miller & Co., 47 Michigan Ave., Chicago, Ill., write us that they have no contract for a plant or water-works here, as recently reported. They have a contract at Two Rivers, but have done nothing on it as yet.

KEOKUK, IA.—The legislature has granted permission to the Keokuk & Hamilton Water Power Co. to construct a wing dam in the Mississippi River, according to reports.

ODEBOLT, IA.—Press reports state that the citizens of this city are considering the question of erecting a plant and a hot water heating plant, to cost about $32,000.

MADISON, WIS.—It is stated that the legislature is considering the question of erecting a plant here, to light the state buildings, to cost about $156,220.

NEW ULM, MINN.—Joseph W. Eckstein, Cy. Attorney, writes us that this city will want a complete plant, with the exception of boiler battery, to run 100 2,000 c. p. arc and 3,000 c. p. incandescent lights. The special committee is now investigating the subject. Contracts will probably not be let before next year.

WEIR CITY, KAN.—The council has asked the legislature for permission to issue $60,000 in bonds for erecting a plant and water-works.

STANTON, NEB.—It is stated that the Stanton Water Power Co. will construct a dam in the Elkhorn River, and build a plant, to cost about $10,000. H. D. Miller, Pres.; Frank A. Raabe, Secy.

PINE BLUFF, ARK.—Local papers state that the Pine Bluff Lumber Co. will erect an electric plant.

AUSTIN, TEX.—Bids are wanted at once by the water and light department for constructing additions to the city's power house. H. C. Patterson, Supt.

HENRIETTA, TEX.—Reports state that the directors of the Henrietta Gin & Light Co. will at once start the erecting of a plant.

ORANGE, TEX.—The Orange Ice, Light & Water-Works Co. will, according to reports, erect a new plant at once, to have a capacity of about 3,000 lights and also a new pole line, etc. P. H. O'Day, Mgr.

TACOMA, WASH.—Judge L. McMurray is said to be interested in a company which proposes to develop the water power at Nisqually Falls.

SAN FRANCISCO, CAL.—We are informed that as yet no steps have yet been taken toward improving the plant of the Winnemucca Water & Light Co. M. G. Moebus, Secy.

SKAGWAY, ALASKA.—Press reports state that Charles B. Hurley, of Tacoma, Wash., and R. C. Collins, of Seattle, Wash., who control the Alaska Light & Power Co., propose to purchase and consolidate with that company's plant the Skagway Water-Works and Telephone System. They will then secure water power for the operation of the electric light plant during the summer. They also propose to build a two-mile electric railway to move freight from the wharves to White Pass R. R.

YARMOUTH, N. S.—We are informed that the council is considering the question of installing a municipal plant. For further information, address Construction News Department of Engineering News.

BRIDGES.

CONCORD, N. H.—A bill has passed the legislature authorizing the construction of a free bridge across the Connecticut River at Dalton.

PORTSMOUTH, N. H.—The following bids were received by the Bureau of Yards & Docks, Navy Department, Washington, D. C., on Feb. 16, for building a railway trestle at the navy yard, to be 292 ft. in length: Joseph Ross, 28 School St., Boston, $10,124; Thos. E. Ruggles, 95 Milk St., Boston, $9,439; Hoffman Engineering & Contracting Co., 404 Harrison Bldg., Philadelphia, $9,298; Theodore Childs, Northampton, Mass., $9,832; Miller & Ellis, 17 Milk St., Boston, $8,670; Wm. J. Lawler, 16 City Square, Charlestown, Mass., $7,276.

SPRINGFIELD, MASS.—H. L. Norton, of Collins & Norton, Engrs., Springfield, designers of the proposed bridge at Mittineague, writes that the contract for building the bridge will be let May 1. The bridge will be deck-riveted structure on granite foundations, having two spans 150 ft. in length and 30 ft. wide. The cost is estimated at $20,000.——A commission has been appointed to locate and apportion the cost of a bridge across the Connecticut River in this city, to replace a wooden structure, the cost of which will be in the neighborhood of $250,000.

ALBANY, N. Y.—John N. Partridge, Supt. Pub. Wks., has rejected the bids for the construction of the bridge at Pratt's Landing, between the towns of Greig and Turin, also for bridge, No. 144 over the Erie Canal at Vernon St., Middleport, and for bridge No. 188 over the Erie Canal, west of Tonawanda.

FORT PLAIN, N. Y.—A bill has been introduced in the assembly asking for an appropriation of $6,500, the town of Minden to pay $1,500, for building a new steel bridge across the Otsquago Creek, in this village.

PERTH AMBOY, N. J.—A committee has been appointed by the board of freeholders to consider plans for a bridge over the Raritan River between this city and South Amboy.

JOHNSTOWN, PA.—The county commissioners awarded the contract on Feb. 13 for building a new steel bridge across Loyalhanna Creek, near Latrobe, to the King Bridge Co., Cleveland, O., at $11,300.

PITTSBURG, PA.—Reports state that the Pennsylvania R. R. will rebuild all the bridges on the 35 miles of road between Newcastle and Stoneboro, recently acquired by the company from the W. N. Y. & R. road.

WILMINGTON, DEL.—The Levy Court will ask the legislature for permission to borrow about $170,000 to complete the bridge over Seventh St., and to erect a new bridge over the Christiana River at Market St.

BALTIMORE, MD.—Local papers state that the contract for building a bridge at Sykesville, Md., crossing the ravine on the Springfield Hospital property, has been let to the Structural Iron & Steel Co. at about $12,000. The structure will be 70 ft. long and 17 ft. wide.

WASHINGTON, D. C.—Bills have been introduced in the Congress as follows: Authorizing the Muscogee & Clarksville Bridge Co. to construct a bridge across the Arkansas River between Muscogee and Clarksville, in the Creek Nation, Ind. Ter.; authorizing the Pittsburg & Mansfield R. R. to build a bridge across the Monongahela River.

NASHVILLE, TENN.—The committee appointed to consider the proposition of building a bridge over the Cumberland River at the foot of Broad St., has submitted estimates to Mayor Head showing the cost of a low bridge with a draw, and also for a high bridge. The cost of the former will be about $276,500, or, if alternate plans are adopted, $282,500, and of the latter $386,750. City Engineer Leftwhich may be addressed.

COLUMBUS, O.—The following bids were received by Chas. E. Perkins, State Engr., on Feb. 12 for canal work at Cincinnati: Lockland Aqueduct, two spans, complete, 45 ft. each: King Bridge Co., Cleveland, O., iron, $2,172; Brackett Bridge Co., Cincinnati, O., iron, plan No. 1, $7,985, plan No. 2, $7,325, plan No. 3, $6,950; Alfred Shoman, Roscoe, wooden Howe truss, plan of chief engineer, $4,125; Carthage Aqueduct: Alfred Shoman, Roscoe, work complete (repairs), $3,750.

MARIETTA, O.—Bids are asked until March 4 for a guide pier above the Putnam St. bridge, according to reports. Carl Becker, Cy. Clk.

AUBURN, IND.—Bids are asked until Feb. 22 for building three bridges with stone abutments, to be of 85, 80 and 60-ft. spans, according to reports. Frank P. Seller, County Audr.

INDIANAPOLIS, IND.—The following bids were received by Harry B. Smith, County Audr., Indianapolis, on Feb. 11, for bridge work. (1) Bridge over White River, west of Broad Ripple, substructure fo this was let to Wm. Fife, at $10.85 per cu. yd.; (2) bridge over Eagle Creek on Crawfordsville Road; (3) bridge over Eagle Creek on Reveal Road:

	(1)	(2)	(3)
Mt. Vernon Bridge Co	$18,290	$4,635	$5,940
Joliet Bridge & Iron Co	18,175	5,310	5,697
Indiana Bridge Co	18,165	4,310	5,575
Bellefontaine Bridge Co	17,917	4,490	5,799
Indianapolis Bridge & Iron Works	18,310	4,394	*5,498
Brackett Bridge Co	18,210	4,415	5,690
John Larsh	18,125	4,475	5,775
A. W. Moore	18,375	4,300	5,595
King Bridge Co	17,850	4,875	6,125
American Bridge Co	*17,295	*4,175	5,510
Champion Bridge Co	18,318	5,001	6,000
Canton Bridge Co	19,000	5,000	6,000
Newcastle Bridge Co	17,875	4,290	5,610
Attica Bridge & Metal Co	17,998	5,379	5,715
Vincennes Iron Works	.....	4,750	6,375
Variety Iron Works	.....	4,425	5,610
Rochester Bridge Co	.....	4,310	6,425

*Accepted bids.

WABASH, IND.—Bids are asked until April 1 for constructing five county bridges. B. F. Clemans, County Audr.

GRAND RAPIDS, MICH.—Bids are asked until March 8 for constructing Bridge St. bridges over the east and west sides power canals. The work involves the construction of a concrete-metal bridge of 65 ft. span, and 100 ft. wide, and the reinforcing and reconstruction of a 65 × 66 ft. girder bridge, as stated in our advertising columns. Dudley E. Walters, Pres. Bd. Pub. Wks.; L. W. Anderson, Engr.

RAPID CITY, MICH.—The Wabash Bridge Co. has secured the contract for a steel drawbridge over the Torch River at this place, to cost $3,770, according to reports.

PEORIA, ILL.—Local papers state that the road commissioners of Dillon township, Tazewell county, will build a new iron bridge over the Mackinaw River at Morris Mill, of which the county will be asked to bear half the expense.

MINNEAPOLIS, MINN.—Plans have been completed for the reconstruction of the Chicago, Milwaukee & St. Paul Ry. short line bridge over the Mississippi River. The proposed structure will be a deck bridge 1,061 ft. in length, having seven spans. Three spans will be over the river and the remaining four will be used as approaches. The bridge is to be built by Sept. Onward Bates, Engr. and Supt. Bridges, Chicago.

DAVID CITY, NEB.—Bids are asked until Feb. 23 for building all county iron bridges during the year. John J. Graham, County Clk.

GONZALES, TEX.—Bids are wanted until March 4 for constructing three steel bridges, as follows: One across Peach Creek at the Braches crossing, A. W. Harman, Comr., Gonzales; one across Foster Branch, near Belmont, J. C. West, Comr., Leesville; one across Copperas Creek, near Waelder, N. F. Miller, Comr., Waelder. Address commissioners as above. W. W. Glass, County Judge.

SALT LAKE CITY, UTAH.—The following contractors submitted bids on Feb. 11 for replacing the wooden bridges and combination structures on the main line of the Rio Grande Western Ry., with metal structures, advertised in Engineering News: E. J. Yard, Ch. Engr.: Jacob Atkinson & Son, Colorado Springs, Colo.; Utah Construction Co., Ogden, Utah; E. K. Gaynor, Denver; Harvey, Treewit & Co., Denver; Deal Bros. & Mendenhall, Springville, Utah; W. C. Bradbury & Co., Denver; N. P. Glann Construction Co., Chicago, Ill.

CHATHAM, ONT.—Bids are asked until March 8 for constructing a steel trestle approach to a bridge across the Thames River in Kent county, to be 130 ft. in length with four spans 16 ft. wide. J. C. Fleming, County Clk.

TWEED, ONT.—It is stated that the county council has decided to build a bridge over the Moira River, on the boundary between Belleville and the county.

VICTORIA, B. C.—In the improvements projected by the city to be carried out this year is included the construction of the Point Ellice steel bridge, which will cost about $50,000.

FREDERICTON, N. B.—Bids will be received by the Province Secretary until Feb. 27 for the purchase of bonds issued for the purpose of building bridges.

BUILDINGS.

BILLERICA, MASS.—Bids are asked until Feb. 27 for erecting a new 2-story brick schoolhouse, except heating apparatus, to cost about $25,000. Cooper & Bailey, Archs., 93 Equitable Bldg., Boston.

WOONSOCKET, R. I.—Frank H. Mills, Cy. Engr., informs us that the report that the council is considering the question of erecting a new city hall building is simply talk at present.

NEW HAVEN, CONN.—The board of education has accepted the plans of Brown & Von Beran, Exchange Bldg., for the proposed new schoolhouse on Cedar St., to cost about $44,000.

BROOKLYN, N. Y.—Plans have been filed by T. Corrigan, 456 Seventh St., for two 4-story brick flats, 25 x 69 ft., at Quincy St., near Stuyvesant Ave., to cost about $27,000. G. F. Roosen, Arch., 189 Montague St.; by the Brooklyn Union Gas Co., 130 Remsen St., for a steel gas holder 126 ft. in diameter, at Clarkson St., near Nostrand Ave., to cost about $60,000. Bartlett, Hayward & Co., builders, Baltimore, Md., and 15 Wall St., New York; by Jos. Barudio, 177 Jefferson St., for six 3-story brick flats, 25 x 71 ft., at Hamburg Ave., near Bleecker St., to cost about $48,000, and for two 3-story brick flats, at Ralph and Hamburg Aves. and Bleecker St., and Hamburg Ave., to cost about $20,000. W. Debus, Arch., 808 Broadway; by Louis Beer, 808 Broadway, for five 4-story brick flats, 27 x 69 ft., at Prospect Park West, near 13th St. to cost about $80,000, and for two 4-story brick flats, 28 x 93 ft., at Prospect Park West, and 13th and 14th Sts., to cost about $40,000.——We are informed that the contract for erecting the steel storm shed, 100 x 200 ft., at Sheepshead Bay, for the Coney Island Jockey Club, to cost about $20,000, has been let to A. R. Whitney, Jr., & Co., 78 Fifth Ave., New York. Dodge & Morrison, Archs., 41 Wall St., New York.

BUFFALO, N. Y.—The Great Eastern Elevator Co., writes us that its new grain elevator will be of steel, 300 x 300 ft., furnished with electric light and power and will have a capacity of 2,500,000 bushels.——It is stated that Fred. Corey and Charles E. Mead will erect a 7-story brick apartment house at Delaware Ave.——Reports state that the building committee of the Y. M. C. A. will at once take steps toward the erection of a new building to cost about $175,000.

ELLIS ISLAND, N. Y. H.—Bids are asked until March 5 for the electric work for the hospital building, hospital out-building, surgeon's house, bath and laundry building, kitchen and restaurant building, boiler house, connecting corridor and covered way (including ferry house), central lines and out-door lighting, at the U. S. Immigrant Station, Ellis Island. James K. Taylor, Supv. Arch., Treasury Dept., Washington, D. C.

KINGSTON, N. Y.—The board of education is considering the question of issuing $26,000 in bonds for rebuilding the burned schoolhouse.

NEW YORK, N. Y.—We are informed that the contract for erecting the alterations to the residence at 33 West 56th St. for E. Wasserman, has been let to Harvey Murdock, 116 Nassau St. C. P. H. Gilbert, Arch., 1123 Broadway.——C. T. Barney, Pres., Knickerbocker Trust Co., 66 Broadway, writes us that nothing has yet been done toward erecting the proposed new Brunswick Hotel.——R. N. Young, A. M. Young, Francis J. Paton, Isaac Townsend, all of 11 West 19th St., and others, have incorporated the No. 4 East 49th St. Co., to erect a bachelor apartment house at 4 and 6 East 49th St., to cost about $250,000.——It is stated that Joseph Fleischman, Hoffman House, will erect an apartment house at 101 and 103 East 29th St. Buchman & Fox, Archs., 11 East 59th St.——Reports state that the City Cold Storage Co., will erect a 10-story fireproof storage building at West Hubert, Washington and Laight Sts. J. W. Hinkley, Poughkeepsie, and George H. Prentiss and W. Fellowes Morgan are said to be interested.——The Y. M. C. A. will, it is said, erect a new brick building at 150th St. and Spencer Place, to cost about $55,000, for the railroad branch.——Woodruff Leeming, 111 Fifth Ave., is said to have prepared plans for a 4-story brick training school on Central Park West, near 100th St., to cost about $60,000, for the New York Red Cross, 259 West 93d St. Wm. T. Wardwell, Pres.; Thos. A. McNicholl, Secy.

NEW YORK, N. Y.—Plans have been filed by William H. Pickens, 61 West 113th St., for eight 3-story brick dwellings, 18 x 50 ft. and 19 x 57 ft., at 137th St., near Seventh Ave., to cost about $176,000. John Hauser, Arch., 1125 Broadway; by Frederick McCarthy, for three 4 and 5-story brick tenements, 27 x 85 ft. and 34 x 74 ft., at Forest Ave. and 156th St., to cost about $71,000. W. C. Dickerson, Arch., Third Ave. and 149th St.; by Peter Herter, 7 Chatham Square, for an 8-story brick hotel, 25 x 90 ft., at 59th St., near Madison Ave., to cost about $125,000, and also for four 8-story brick apartment houses, 50 x 90 ft., at 58th St., near Madison Ave., to cost about $1,000,000. P. Herter & Son, Archs., 7 Chatham Square; by Kurzrock & Melken, 81 Walker St., for two 6-story brick flats, 25 x 81 ft., at 331 and 333 East Eighth St., to cost about $46,000. C. B. Meyers, Arch., 1 Union Square; by Gordon, Levy & Co., 159 Canal St., for two 7-story brick apartment houses, 26 x 86 ft., at 172 and 174 Mulberry St., to cost about $52,000. C. B. Meyers, Arch.; by J. N. Osorio, 28 West 91st St., for an 11-story brick loft building, 25 and 75 x 184 ft., at 18 to 22 West 20th St., to cost about $375,000. De Lemos & Cordes, Archs., 130 Fulton St.; by the Manhattan Ry. Co., 195 Broadway, for a 2 and 3-story brick electric storage station, 50 x 100 ft., at 161st St. and Third Ave., to cost about $31,000; by William H. Moore, 4 East 54th St., for a 3-story brick stable, 75 x 95 ft., at 202 to 206 West 58th St., to cost about $100,000. Hill & Stout, Archs., 1123 Broadway; by Andrew Brose, 311 West 101st St., for two 5-story brick tenements, 25 x 81 ft., at 139th St. and St. Ann's Ave., to cost about $32,000. Charles Rentz, Arch., 153 Fourth Ave.; by Louis Lese, 35 Nassau St., for seven 6-story brick flats, 25 x 88 ft., at 106th St., near Second Ave., to cost about $196,000. George F. Pelham, Arch., 503 Fifth Ave.; by Mount Sinai Hospital, for nine brick hospital buildings at 100th and 101st Sts. and Fifth and Madison Aves., to cost about $1,600,000. Arnold W. Brunner, Arch., 36 Union Square East.

NEW YORK, N. Y.—Bids are asked by the state commissioner in lunacy until Feb. 27 for plumbing, heating and wiring a number of buildings at the Manhattan State Hospital, on Ward's Island. Henry E. Howland, Pres. Bd. Mgrs., 1 Madison Ave.

NEW YORK, N. Y.—The following bids were received Feb. 20 by the armory board, City Hall, for an armory building at 50 to 62 West 66th St., for the First Battery, N. G., N. Y., (1) being for N. H. granite, (2) for red sandstone and (3) for plumbing: Williams & Gerstle, 44th St. and 1st Ave., (1) $188,694, (2) $185,894; Jas. D. Murphy, 1183 Broadway, (1) $183,960, (2) $176,700; Ryan & McFerren, 106 E. 23d St., (1) $195,000, (2) $189,500; Luke A. Burke, 401 W. 59th St., (1) $170,911, (2) $165,000; J. R. Sheehan & Co., 253 Broadway, (1) $194,900, (2) $187,500; Thomas Cockerill & Son, 220 4th Ave., (1) $184,500, (2) $174,900; M. J. O'Brien, 835 6th Ave., (3) $13,765; Jas. Fay, 205 E. 51st St., (3) $14,436; Edward J. Renehan, 163 E. 35th St., (3) $16,784; J. Manneschmidt, 966 Myrtle Ave., Brooklyn, (3) $16,500.

NIAGARA FALLS, N. Y.—Press reports state that C. R. Phelps, Gluck Bldg., will prepare plans for a cold storage building here, to cost about $35,000.

SYRACUSE, N. Y.—We are informed that the contract for erecting the new mechanical building, 4 stories, brick, 133 x 56 ft., for Syracuse University, to cost about $75,000, has been let to Wm. Dickison & Son. Gaggin & Gaggin, Archs., University Bldg.

BRIDGETON, N. J.—W. M. Sharp, Cy. Engr., writes us that the council has refused to build a new schoolhouse. No plans are out.

ELIZABETH, N. J.—The board of supervisors is said to have decided to erect a new courthouse to cost about $250,000.

ATLANTIC CITY, N. J.—Reports state that the contract for erecting a new 6-story brick apartment house, 100 x 50 ft., at Pacific and New York Aves., for Mrs. Mary S. Galbreath, to cost about $50,000, has been let to Stiles & McClay.

LEWES, DEL.—The following bids were received Feb. 6 by J. K. Taylor, Supv. Arch., Treasury Dept., Washington, D. C., for erecting a building for cabin passengers at the Quarantine Station, Delaware Breakwater: R. C. Ballenger & Co., Philadelphia, Pa., $8,314; Wm. H. Virden, Lewes, Del., $6,543; W. H. & F. W. Coyer, New York, $10,797; F. L. Hoover & Son, Philadelphia, Pa., $10,750; Jas. F. Griffith, Lewes, Del., $5,455.

FRANKLIN, PA.—C. J. S. Miller, Mayor, writes us that the question of erecting a new high school building has been postponed indefinitely.

McKEES ROCKS, PA.—Press reports state that W. F. Tausch, 430 Lincoln St., Cleveland, O., has been awarded the contract for erecting the new church building here for St. Mary's R. C. Congregation, to cost about $120,000.

PHILADELPHIA, PA.—The contract for erecting the new schoolhouse at Susquehanna Ave. and Lawrence St. is said to have been let by the board of education to George W. Pierson, at $66,900.——John R. Wiggins, Heed Bldg., has been awarded the contract for erecting a 4-story brick factory building, 26 x 48 ft., at 146 North Tenth St., for Benjamin Alexander and Bernard Thalheimer. C. E. Oelschlager, Arch., Harrison Bldg.——It is stated that Edward House will erect a 6-story brick building at Water and Smithfield Sts., to cost about $100,000.——Milligan & Webber, 520 Walnut St., are said to have prepared plans for a 7-story brick apartment house at Clinton and Tenth Sts., for Frank S. Riggs.——Sherman, Orem & Co., are said to have been awarded the contract for erecting the proposed 5-story brick warehouse building, 70 x 147 ft., at Vine and Orianna Sts., for Leas & McVitty. Keen & Mead, Archs., 1420 Chestnut St.

PITTSBURG, PA.—C. M. Bartberger, Arch., Westinghouse Bldg., writes us that the new public school building on Margaretta St., will be two stories, fireproof, with steam heat and electric lights and cost about $125,000.——We are informed that bids will be received up to March 1 for erecting a brick warehouse building, 96 x 180 ft., at Penn Ave. and Third St., for Follansbee Bros. Co. Ellsworth Dean, Arch., Penn. Bldg.——It is stated that J. W. Arrott will erect an 18-story stone office building, 73 x 60 ft., at Wood St., and Fourth Ave., to cost about $250,000.

ANNAPOLIS, MD.—Bids are asked until March 14 for installing a heating apparatus, complete, in the U. S. building here. James K. Taylor, Supv. Arch., Treasury Dept., Washington, D. C.

ANNAPOLIS, MD.—The State Building Commission has selected the plans of Baldwin & Pennington, 44 South St., Baltimore, for the new building here for the Court of Appeals, to be of stone, two stories, 100 x 120 ft., and cost about $260,000.

BALTIMORE, MD.—Douglas H. Thomas, Jr., Atlantic Trust Bldg., and J. H. Parker, 1 Sommerset St., Boston, Mass., are said to have prepared plans for a 12-story brick and stone hotel building, 184 x 50 ft., at Chase and Charles Sts., to cost about $700,000, for a company, in which Nelson Perry, Wm. P. Harvey, Alexander Brown and others are said to be interested.

CUMBERLAND, MD.—It is stated that the house committee has decided to increase the appropriation for the U. S. building here, from $75,000 to $125,000.

NORFOLK, VA.—We are informed that the following bids were received Feb. 16 by M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C., for erecting a two-story brick office building at the navy yard here, (1) being for building complete, according to plans and specifications, (2) price for using additional exterior brick work, (3) additional stone work, (4) for substituting interior oak finish for yellow pine and for additional interior painting: Tyree Bros., No. 510 Duncan St., Norfolk, Va., (1) $18,460, (2) $21,300, (3) $21,575, (4) $22,125; E. Hart, No. 568 E. Main St., Norfolk, Va., (1) $19,500, (2) add $2,500, (3) add $150, (4) add $1,500; Jas. McMillan, Newport News, Va., (1) $16,690, (2) add $1,490, (3) add $300, (4) add $900; J. H. Brinson, Hampton, Va., (1) $16,117, (2) add $2,000, (3) add $300, (4) add $1,100; J. W. Talliafero & Co., No. 437 Second St., Brooklyn, N. Y., (1) $17,990, (2) add $1,078, (3) add $200, (4) add $665; R. A. Griefen, Chamber of Commerce Bldg., Chicago, Ill., (1) $18,280, (2) add $2,000, (3) add $200, (4) add $600; Hobbs & Parkenson, No. 1411 G St., Washington, D. C., (1) $17,976, (2) add $1,588, (3) add $200, (4) add $1,550; the amount available is $18,500.

CHARLOTTE, N. C.—It is stated that the Piedmont Realty Co. has had plans prepared for a 10-story office building, 65 x 80 ft., on South Tryon St., to cost about $50,000.

COLUMBIA, S. C.—Brite & Bacon, 111 Fifth Ave., New York, N. Y., are said to be preparing plans for a new 10-story brick office building, at Washington and Main Sts., to cost about $185,000. E. W. Robertson, Pres. Loan and Exchange Bank, is said to be interested.

COVINGTON, GA.—Bids are asked by the board of commissioners of roads and avenues, until April 10 for erecting a new jail building. W. S. Ramsey, Chn. Com.

SAVANNAH, GA.—Bids are asked until March 11 for erecting new buildings at the U. S. Quarantine station here. James K. Taylor, Supv. Arch., Treasury Dept.

BIRMINGHAM, ALA.—Bids are asked by the board of education until March 1 for erecting a new brick school house. James R. and Richard Ryan, Archs., 417 Chalifoux Bldg.

COLUMBIA, LA.—Jack J. Meredith, Chn. Com., will receive plans and specifications for a new jail building here, to cost between $6,000 and $10,000. R. R. Redditt, Secy.

NATCHEZ, MISS.—Bids are asked until March 21 for erecting a new brick school house. Wm. G. Benbrook, Mayor; Thomas R. Quarterman, Cy. Clk.

CHATTANOOGA, TENN.—Bids are asked until Feb. 21 for foundations for fire hall No. 1 and for erecting fire hall No. 4. Sam. W. Duncan, Chn. Bldg. Com.

LOUISVILLE, KY.—We are informed that contracts will probably be let in April for erecting the proposed new 2-story brick schoolhouse, 210 x 180 ft. at Seventh and Hill Sts., to cost about $20,000. H. P. McDonald, Arch., 1810 Sixth St.

CINCINNATI, O.—Fugman & Ulrich, 89 Euclid Ave., Cleveland, are said to have prepared plans for the proposed new Catholic Church building at Norwood, to cost about $40,000.

NORWALK, O.—Bids are asked by J. P. Link, until March 12 for erecting a 3-story brick block. S. H. Shively, Arch., Fremont.

TOLEDO, O.—Bids are asked by the board of police commissioners until March 9 for remodeling the Central Municipal Police station. C. H. Durian, Clk. Bd.

WOOSTER, O.—Bids are asked by the board of education until Feb. 23 for erecting a 2-story brick schoolhouse John C. Schultz, Pres. Bd.; Philip Markley, Clk.

INDIANAPOLIS, IND.—Adolph Scherrer, Indian Trust Bldg., is said to have prepared plans for a 3-story brick apartment house, 250 x 165 ft. on Capitol Ave., near 12th St. C. S. Lewis is said to be interested.

ANN ARBOR, MICH.—E. W. Groves, Cy. Engr., writes us that he is preparing plans for a 2-story brick city hall building, 44 x 125 ft., with steam heat and electric lights, to cost about $30,000.

DETROIT, MICH.—Donaldson & Meier, Moffat Bldg., are said to be preparing plans for a 12-story office building at Griswold and Congress Sts., to cost about $1,000,000.

MUSKEGON, MICH.—It is stated that Patton & Fisher, 115 Monroe St., Chicago, Ill., have prepared plans for a public library building, a training school and a gymnasium building, to cost about $75,000, for this city.

AURORA, ILL.—Dr. W. A. Colledge, Pres. Bd. Library Trustees, writes us that nothing has yet been done in relation to securing plans for the proposed new Carnegie library building.

CHICAGO, ILL.—Plans have been filed by C. J. Magee, owner and builder, for a 3-story brick apartment house, 125 x 50 ft., at 309 and 311 Floumoy St., to cost about $28,000. James Burns, Arch., 185 Dearborn St.; by Rev. M. Krawezmas, owner and builder, for a 1-story brick church building, 66 x 146 ft., at 33d St. and Auburn Ave., to cost about $40,000. W. L. Klever, Arch., 109 Randolph St.; by George W. Todd, for a 3-story brick apartment house, 118 x 50 ft., at 1972 and 1974 Kenmore Ave., to cost about $40,000. William G. Kreig, Arch., 84 Washington St., Paul Mueller, builder, 109 Randolph St.; Albert Meyer, for one and two-story brick office building, barn and ice making plant, and shelter shed, 40 x 20 ft., 85 x 149 ft., 53 x 285 ft., and 64 x 45 ft., at 20 to 34 Claybourn Place, and 22 Wabansia Ave., to cost about $60,000. Louis Leble, Arch., 103 Randolph St.; Falkenaw Construction Co., builders, 108 La Salle St.

CHICAGO, ILL.—Reports state that G. R. Gott will erect a 3-story brick apartment house, 100 x 41 ft., at Fullerton and Racine Aves., to cost about $85,000. D. S. Pentecost, Arch., Metropolitan Block.——It is stated that B. F. George will erect a 3-story brick apartment house, 100 x 50 ft., at Fillmore St. and Western Ave., one at Greenshaw St. and Western Ave., and one on North Carolina Ave., near St. George's Court, to cost in all about $75,000. L. M. Mitchell, Arch., 145 La Salle St.——Arthur Foster, 4310 Cottage Grove Ave., is said to have completed plans for five 2-story brick flats, 20 x 50 ft., at 49th and Fulton Sts., for C. A. Denham, to cost about $30,000.——Nimmons & Fellows, 204 Dearborn St., are said to be preparing plans for a new brick warehouse, 150 x 170 ft., at Fulton and Jefferson Sts., for Sears, Roebuck & Co., to cost about $300,000.——It is stated that W. J. Brinkman, 163 Randolph St., has completed plans for a 4-story brick parochial school building, 110 x 125 ft., at Exchange Ave., near 87th St., to cost about $50,000, for the Church of the Immaculate Conception.——The National Life Insurance Co. will, it is said, erect a new 10-story brick and stone office building, at 157 to 163 La Salle St., to cost about $1,000,000. The contract has been let to the George A. Fuller Co., Marquette Bldg. Plans have been prepared by Jenney & Mundie, New York Life Bldg.

DECATUR, ILL.—It is stated that Andrew Carnegie has offered this city $60,000 for erecting a new library building.

MILWAUKEE, WIS.—The Blatz Brewing Co., Broadway, near Johnson St., has filed plans for a new stock house, to cost about $48,000, on Broadway.

CHEROKEE, IA.—Bids are asked until March 12 for constructing several buildings and improvements at the hospital for the insane. L. G. Kinne, Chn

DES MOINES, IA.—It is stated that Frank Getchell is having plans prepared by Hallett & Rawson, 615 Walnut St., for a 6-story brick warehouse, 63 x 133 ft., at Ninth and Walnut Sts.

MASON CITY, IA.—Bids are asked by the board of trustees until March 14 for erecting a new college building for the Memorial University. W. A. Morris, Secy. Bd.; Smith & Gutterson, Archs., Des Moines.

MINNEAPOLIS, MINN.—The contract for erecting the new warehouse at Seventh Ave., South and Third Sts., for the J. I. Case Implement Co., is said to have been let to the H. N. Leighton Co., 213 South Sixth St., at about $65,000.

WICHITA, KAN.—Bids are asked by the board of education until Feb. 28 for erecting a new brick schoolhouse in the Ingalls district. C. S. Caldwell, Secy. Bd.

FORT KEOGH, MONT.—Bids are asked until Feb. 28 for constructing a new hospital building here. George E. Pond, Ch. Q. M., Helena.

KANSAS CITY, MO.—The contract for erecting the new Burnham, Hanna, Munger & Co. Building, at Eighth St. and Broadway, to cost about $300,000, is said to have been let to George L. Brown & Son, 2000 Baltimore Ave.

DALLAS, TEX.—It is stated that the Texas & Pacific Ry. Co. has let the contract for erecting a grain elevator here, to have a capacity of about 1,000,000 bushels, to J. W. Thompson, Wainwright Bldg., St. Louis, Mo., at about $350,000.

DENVER, COLO.—Walter L. Rice, Mack Block, has prepared plans for a 4-story brick apartment house, 125 x 125 ft., at 13th and Ogden Sts., for Mrs. W. T. Cornwall, to cost about $70,000.

SEATTLE, WASH.—We are informed that plans for the new public library building here will be advertised for as soon as arrangements for a site have been completed.

LOS ANGELES, CAL.—Howard, Train & Williams, 20 Kaweat Block, are said to have prepared plans for a 5-story brick building at Third and South Hill Sts., for the Conservative Life Insurance Co., to cost about $100,000.——It is stated that the Concordia Club will erect a new clubhouse, to cost about $30,000. John Kahn, Pres.

MONTREAL, QUE.—The fire committee will, it is said, ask for an appropriation of $100,000 for erecting a new fire engine house.——It is stated that the council will give $50,000 each to the Grey Nuns and the Royal Victoria Hospital, to erect buildings for contagious diseases.

VICTORIA, B. C.—The board of school trustees are said to have asked for an appropriation of $30,000 for erecting a new high school building.

WINNIPEG, MAN.—F. D. Orff, Lumber Exchange, Minneapolis, Minn., is said to have prepared plans for a 3-story brick flat building here for Walter Suckling & Co., to cost about $60,000.

WATER-WORKS.

BRIDGTON, ME.—The Bridgton Water Co. has asked to be incorporated with a capital of $50,000 by Winburn M. Staples, Bridgton; E. E. Goodwin and Chas. A. Bodwell, of Sanford, Me. The water supply will be secured from Highland Lake or Woods Pond.

DARTMOUTH, N. H.—The committee has submitted estimates for extending the works and sewers, to cost about $56,507.

SUNAPEE, N. H.—The legislature has granted this place authority to build works.

BOSTON, MASS.—Bids are asked until Feb. 27 for hauling water pipe, castings, gates, wood, etc. A. P. Martin, Water Comr.

CHICOPEE, MASS.—The question of appropriating $70,000 for furnishing a water supply to Willimansett and Fairview is being considered. Address Water Commissioner Gale, City Engineer Cobb and Mayor Loomis.

NORTHAMPTON, MASS.—C. N. Clark has prepared a bill to be submitted to the legislature asking for authority to secure a new water supply from West Wheatly and Conway brooks.

FALL RIVER, MASS.—The council has appropriated $20,000 for extending the water mains, $25,000 for sewers and $130,000 for steel work.

BRISTOL, CONN.—The Bristol Water Co. has voted to extend its mains to Forestville. It is said that this action was taken to prevent the granting of a charter to the Forestville Water Co. Forestville has a population of 1,500.

EAST HARTFORD, CONN.—The city wishes to increase its debt limit from $300,000 to $400,000 to purchase the works and to extend the same.

NEW LONDON, CONN.—The legislature has been asked to permit this city to issue $300,000 in bonds for extending its works.

PLAINVILLE, CONN.—The town has refused to reconsider the question of building town works, on account of dissatisfaction with the Plainville Water Co.

SOUTHINGTON, CONN.—A bill has been introduced in the legislature authorizing this city to buy the works of the Southington Water Co.

WINDSOR, CONN.—The Windsor Water Co. has asked the legislature for permission to amend its charter so as to enable it to bring water from Barber's Pond at a cost of $50,000. The company intends to supply water to the proposed new Loomis Engineering Institute (costing $350,000). Henry W. Ayres, Engr.; N. W. Hayden, Pres.

FULTONVILLE, N. Y.—We are informed that it is proposed to secure a gravity supply from springs supplying upper reservoir, four miles from the village, to a lower reservoir on the hill above village. There will be an 8-in. supply pipe and 4 to 12-in. distributing pipe, hydrants, specials, valves, etc. The supply pipe will cross the Mohawk River. Bids will be asked about March 30. Estimated cost, $50,000. Howell & Taylor, Des. Engrs., 605 12th St., N. W., Washington, D. C.; Emil Kuichling, Rochester, is retained as consulting engineer by the above.

GLENS FALLS, N. Y.—The village trustees are reported in favor of an auxiliary pumping system and also the raising of the reservoir dam about four feet. Address President Haskell and Trustee Brennan.

MALONE, N. Y.—The Malone Water-Works Co. has submitted a proposition asking for a 25-year contract to furnish water at $25 a hydrant a year instead of $40, as at present.

NEW YORK, N. Y.—Mayor Van Wyck has signed the resolution authorizing a bond issue of $313,000 for extending the pumping plant at Jerome Park reservoir. Wm. Dalton, Comr. Water Supply.——The following bids were received Feb. 14 for constructing the filter plants at Baisley's and Springfield Ponds:

Bidder.	Filters: Pumping stations at Jamaica, 5,000,000 galls. per day.	Springfield, 3,000,000 galls. per day.	Concrete, 500 cu. yds.
Williams & Gerstle, 1st Ave. and 44th St., N. Y.	$104,640	$94,610	$6.80
Borough Construction Co., 189 Montague St., Brooklyn	105,000	97,000	7.00
John McNamee, Brooklyn	95,000	88,000	7.00
J. P. Cranford & Co., 215 Montague St., Brooklyn	90,000	70,000	8.50
American Filter Constructing Co., 23 Broad St., New York	88,000	82,000	7.00

NEW YORK, N. Y.—Bids are asked by the department of water supply, 21 Park Row, Manhattan, until March 7 for furnishing and erecting two new boilers, etc., at the Mount Prospect pumping station, and removing the four old boilers, for furnishing white wood plugs, lead, hydrant-catches, bolts, etc., and tapping cocks, boxes, plugs, hydrant caps, handles, screws, etc.

RAYBROOK, N. Y.—The state proposes to build works and a sewerage system for the new State Tuberculosis Hospital at Raybrook. Address A. D. Lawton, C. E., State Arch's. Office, Albany, and Lem Merrill, C. E., of Loon Lake, N. Y.

SCHENECTADY, N. Y.—We are informed that the water commissioners have decided to install a system of water meters. W. J. Marlette, Secy. Comrs.; John McDermott, Pres.; G. T. Ingersoll, Supt.

WATERVLIET, N. Y.—A bill is before the legislature authorizing the water commission to make surveys, etc., for new works. It is said that the East Albany Water Co. proposes to build another water tower on a hill at Bath. The new filter plant will soon be completed.

WHITNEY POINT, N. Y.—The question of works is reported as being considered.

ELMER, N. J.—A. Kandle, Ch. Fire Dept., writes us that this place is not yet in shape to talk about building works.

JERSEY CITY, N. J.—The water department intends to ask the legislature to grant this city authority to install water meters.

SWEDESBORO, N. J.—The township committee is reported as considering the matter of granting a franchise to the Woolwich Water Co.

ALTOONA, PA.—The matter of installing water meters, requiring about 8,000, is being considered. B. M. Banker, Pres. Bd. of Trade; H. K. McCauley, Water Comr.; E. F. Giles, Mayor.

BUSHKILL, PA.—The Wildmere Water Co. has applied for incorporation by Sam'l. Turn, of Bushkill, and John B. Williams, of Stroudsburg. The water supply will be secured from Lehman township, Pike county.

DOYLESTOWN, PA.—Wm. P. Bancroft, of Wilmington, Del., has offered to establish water-works for the George School. C. N. Thompson, Treas.

NORTH BRADDOCK, PA.—The council has granted permission to the Pennsylvania Water Co., Pittsburg, to lay a 16-in. main, and work will begin April 1.

PHILADELPHIA, PA.—The following bids were received by Wm. C. Haddock, Dir. Pub. Wks., Feb. 11 for constructing the Lower Roxborough filtration plant, not including valves, pipe, etc.: D. J. McNichol, Betz Bldg., $229,083, 5 mos. (accepted); Hoffman Eng. & Constn Co., Harrison Bldg., $257,048, 10 mos.; Harmer & Quinn, Fidelity Bldg., $202,937, 8 mos.; Bryan & Kelly, 8 South Broad St., $229,000, 8 mos.; R. A. Malone & Son, Lancaster, Pa., $219,000, 9 mos.; Geo. A. Vare, Betz Bldg., $247,300, 9 mos. The bids received for the work in December, when the specifications were more comprehensive, but subsequently rejected, follow: R. A. Malone, $221,441; Bryan & Kelly, $241,688; Harmer & Quinn, $244,944; David Peoples, $268,192; Hoffman Eng. & Const'n Co., $269,863; National Cont. Co., 11 Broadway, New York, $329,015. For the installation of pipe the only bidder of a lump sum was Daniel J. McNichol, $669,633, who secured the contract. For valves and other fittings there were seven bids. The Maignen Filter Co. has secured the contract for a 1,000,000 gallon filtration plant for the city hall at $19,800.

PITTSBURG, PA.—The following bids for the third time were received by G. W. Wilson, Dir. Pub. Wks., Feb. 8 for furnishing two 12,000,000-gallon pumping engines for the Brilliant pumping station: The Camden Iron Works, $252,575; Wilson, Snyder & Co., $240,000. The bid of Henry R. Worthington was not announced, the bond being defective. T. P. Jones bid $5,950 for inspecting the engines and the Pittsburg Pipe Testing Co. $2,340. Robt. W. Hunt & Co. offered to inspect and test the engines for $4,000 or to take 2% on the cost of the first engine and $225 on the second one. The Federal Water Co. has offered to furnish 200,000 gallons of water a day to the city home at Marshalsea at 10 cts. a 1,000 gallons. J. M. Anderson, Dir. Dept. of Charities.——The St. Clair Water Co. has offered to sell water to the 38th Ward. A. B. Sheperd, Supt. Bureau of Water Supply.——It is expected that bids will be received early next month for constructing the new filtration plant. Wm. F. Miller, Engr.

SHARPSBURG, PA.—This city will vote April 4 on the question of issuing $30,000 in bonds for improving the works and electric plant.

WATERFORD, PA.—The question of works is being considered; estimated cost, $20,000. H. Rice is interested.

BALTIMORE, MD.—The proposed reservoir for Walbrook is estimated to cost about $450,000, and it is stated that the Water Board has not the money available for the purpose. The board proposes to double the capacity of Loch Raven, which will call for the purchase of a dredging plant to cost about $90,000.

NEWPORT NEWS, VA.—The Virginia Artesian Water Co. has been incorporated with a capital of $300,000 by Thos. B. Henley, W. B. Vest, W. W. Woodward, of Newport News, and Isaac Diggs, of Richmond, Va.

WOODSTOCK, VA.—G. McKain, of Salem, W. Va., has been awarded the contract at $18,200 for constructing the works, to be completed by June 3. There will be required 5,700 ft. 8-in. pipe, a 120,000-gallon reservoir, two intakes, 28 hydrants, etc.

PHILIPI, W. VA.—The question of building works is reported as being considered.

CHARLESTON, S. C.—The Charleston Water-Works Co. has offered to furnish this city with 5,000,000 gallons of water a day for 30 years, the city to have the option of purchasing the works. The city is to pay a rental of $30,000 a year for the mains. The company proposes to extend its mains to 50 miles, with the necessary hydrants, etc., and to make a number of other improvements, to be completed within a year. The new water supply will be secured from the springs about Ten-Mile Hill. C. A. Chisolm, Supt.; Sam'l. Lapham, Chn. Water. Com.

CENTERVILLE, ALA.—Reports state that ex-Sheriff Robt. Vance proposes to build works, an electric plant and a sewerage system at once.

JENNINGS, LA.—The Illinois Canal & Rice Co. has been incorporated with a capital of $150,000 to build an irrigation system at once.

OPELOUSAS, LA.—The aldermen have appropriated $2,500 for extending the mains and placing 10 new electric lights. The question of sewers is also being considered. B. A. Littell, Mayor.

ROCKWOOD, TENN.—The council is reported as considering propositions for preparing plans for works and an electric plant, to cost $20,000. J. C. Jennings, Secy. Com.; J. A. East, Chn.

CLOVERPORT, KY.—Owensboro, Ky., parties are reported to have submitted a proposition to put in works, an electric plant and an ice plant.

MARION, KY.—It is reported that this place will soon build works and an electric plant.

CALIFORNIA, O.—Bids are asked by R. M. Quigley & Co., Rialto Bldg., St. Louis, Mo., contractors for reservoir work for the Cincinnati water-works at California, for sub-contracts on the reservoirs, as described in our advertising columns. Address Quigley & Co., at California.

MIAMISBURG, O.—The council is considering propositions from Dayton and other parties for putting in works.

SYCAMORE, O.—This place is reported to have voted Feb. 11 on the question of issuing $6,000 in bonds for works.

TOLEDO, O.—J. D. Cook, Low Bldg., Toledo, is reported as making plans for a new water supply, to be secured from the lake, about 13 miles distant. It is proposed to build two mains from the lake to the standpipe.

YOUNGSTOWN, O.—W. S. Hamilton, Supt., writes us that the following bids were received Feb. 11 for two water cylinders for the 22-40-22½-26 Deane 5,000,000-gallon compound pumping engine: Wilson-Snyder Mfg. Co., Pittsburg, Pa., $7,250; Laidlaw-Dunn-Gordon Co., Cincinnati, O., $5,800; Deane Steam Pump Co., Holyoke, Mass. (accepted), $5,475.

JONESBORO, IND.—Reports state that this place will vote on the question of issuing $25,000 in bonds for works and an electric plant.

MARION, IND.—The council proposes to buy a new air compressor, a 5,000,000-gallon pump and boiler and overhaul the steam plant at a cost of $20,000. Address Superintendent Halley.

SYRACUSE, IND.—Bids are asked until March 10 for constructing works, to cost $16,000. H. M. Buckhols, of the board, writes us that there will be two direct pressure pumps, a standpipe 50 ft. high, about 2½ miles of pipe, etc. A. G. Carlson, Engr., Syracuse.

DETROIT, MICH.—Bids are asked until March 4 for the superstructure addition to the pumping station in Water-Works Park. Spier & Rohns, Archs., Chamber of Commerce Bldg.; B. J. Guiney, Secy. Comrs.

ESCANABA, MICH.—The works of the Escanaba Water-Works Co. have been sold to an eastern syndicate for $122,000. It is stated that improvements will be made. W. D. Boyer, of Scranton, Pa., and W. J. Hatton, of the Chicago & N. W. Ry., are interested.

GRAND RAPIDS, MICH.—Bids are asked until March 6 for furnishing this city with a permanent water supply of not less than 10,000,000 gallons a day, as described in our advertising columns. This is a postponement of the opening from Feb. 15, advertised in our issues from Nov. 22. There are some changes in the wording of the advertisement in regard to deposits, as a deposit need not exceed $50,000. The extension of time was made at the request of several contractors, who needed more time to complete their plans. D. E. Waters, Pres. Bd. Pub. Wks.; G. R. Perry, Mayor; L. W. Anderson, Acting Cy. Engr.

SAULT STE. MARIE, MICH.—John G. Stradley, Mayor, writes us that it is proposed to construct new works, going up about two miles further towards Lake Superior for the water supply, but as yet no plans have been decided upon. It is hoped, however, to be ready to let contracts by May 1. Jas. Lavine, Cy. Engr.

FLORA, ILL.—The council is considering a proposition from a Chicago firm to build works to cost $42,000, the water supply to be secured from the Raccoon River, three miles west from here.

GRAYVILLE, ILL.—This place is reported to have defeated the proposition to issue $22,700 of 20-year bonds to buy the works.

AMHERST, WIS.—This place has voted to build works for fire protection.

WILMETTE, ILL.—The village board is considering the question of building city works, instead of continuing to gets its water supply from Evanston.

FORT ATKINSON, WIS.—This place has voted to issue $35,000 in bonds for works. D. Bullock, Mayor.

MENASHA, WIS.—The question of issuing $300,000 for new works is being considered. Judge G. W. Bradley is interested. J. P. Miller & Co., 47 Michigan Ave., Chicago, Ill., write us that they have had no dealings with this place, as recently reported. They have a contract with Two Rivers, Wis., but so far nothing has been done.

OTTUMWA, IA.—Bids are asked until March 18 for furnishing the materials and for constructing the proposed works, described in our advertising columns in the issues of Jan. 24 and 31 and Feb. 7. This is a postponement from Feb. 11; estimated cost, $318,260. The St. Louis Engineering Co., St. Louis, Mo., submitted the only bid. Changes will be made in the specifications as to time of commencing work and to manner of payments. John T. Brady, Cy. Engr.

RADCLIFFE, IA.—C. E. Myers, Recdr., writes us that the bonds for the works have been sold and that A. Marsten, of Ames, Ia., is making surveys. The water supply will be secured from a well. Pop., 650.

CASS LAKE, MINN.—Heber Hartley, Secy., Treas. and Mgr., Cass Water, Light & Power Co., writes us that work will begin on the extension of the pipe line as soon as the frost is out of the ground. The company will lay 8-in. pipe with 6-in. branch, set eight new fire hydrants, etc. Bids will probably be opened about April 1.

DASSEL, MINN.—Bids are asked until March 6 for furnishing a 100 ft. steel water tower, with tank, gasoline engine, hydrants, etc., and also for sinking an 8-in. well. J. W. Nogren, Village Recdr.

ST. PAUL, MINN.—Bids are asked until Feb. 28 for furnishing f. o. b. cars, St. Paul, 500 stop boxes, with privilege of 250 additional, 4 to 16-in. valve boxes, cast iron specials per ton of 2,000 lbs., 600 ⅝-in. meters, 12 ¾-in., 12 1-in., 6 1½-in. and 6 2-in. meters, to be ordered in lots of 25 and over, certain brass goods, etc., as may be required during the year. John Caulfield, Secy. Bd. Water Comrs.

CHERRYVALE, KAN.—We are informed that Burns & McDonnell, Consult. Engrs., Postal Telegraph Bldg., Kansas City, Mo., have submitted plans and specifications for works to cost $49,000, which the council has approved and adopted. Revilo Newton, Mayor; S. J. Howard, Cy. Clk.

OSAWATOMIE, KAN.—Burns & McDonnell, Kansas City, Mo., have been engaged to prepare plans and specifications for works, for which $38,700 of bonds were recently voted. H. S. Maynard, Mayor.

GREAT FALLS, MONT.—The water commissioners are reported to have recommended additions to the works to cost $40,000.

ST. CHARLES, MO.—Changes in the plans for the proposed works are being made by Hiram Phillips, Lincoln Trust Bldg., St. Louis, Mo. Address Mayor Edward Paule and Councilmen Mudd, Rohlfing and Link.

SHERWOOD, TEX.—The Irion Irrigation & Cattle Co. has been incorporated with $4,000 capital by Geo. E. Weyl, of Sherwood, and J. M. Ostrander, of New York.

ENID, OKLA. TER.—Reports state that the council proposes to extend its water mains.

OKLAHOMA CITY, OKLA.—We are informed that bids will soon be wanted for about 12,000 ft. of water pipe and 15,000 ft. of sewers. The city proposes to build a $30,000 city hall and two miles of brick or asphalt paving. Chas. Chamberlin, Cy. Engr.; Lee Van Winkle, Mayor.

PAGOSA SPRINGS, COLO.—The question of building works to cost from $20,000 to $40,000 is being considered.

LOS ANGELES, CAL.—Bids are asked until 3 p. m., Feb. 25, for furnishing the Los Angeles City Water Co. with about 4,500 lengths (of 12 ft.) of 4 to 20-in. cast-iron pipe, to weigh from 20 to 170 lbs. to ft., and also 100 crosses, tees, bends, etc. The specifications may be seen at the office of Engineering News, 220 Broadway, New York. Wm. Mulholland, Supt.

SANTA BARBARA, CAL.—The city engineer is preparing plans and specifications for improving the works, for which a bond election will be held.

CARSON CITY, NEV.—This place is reported to have defeated the proposition to issue bonds to purchase the works.

CHATHAM, N. B.—Bids were asked until Feb. 20 for furnishing pipe, gates, hydrants, pumping machinery, standpipe, etc., for the proposed new works. Lea & Coffin, Engrs., 53 State St., Boston, Mass.; T. M. Gaynor, Town Clk.

MONTREAL, QUE.—The aldermen are considering a by-law appropriating $400,000 for a filtration plant, $300,000 for the road department, etc. Alderman Clearihue, Chn.

BROCKVILLE, ONT.—This city will vote March 3 on the question of issuing $50,000 in bonds for improving the works.

SEWERAGE.

ATTLEBORO, MASS.—Snow & Barbour, 1121 Tremont Bldg., Boston, have prepared plans, etc., for sewerage and sewage disposal, by intermittent sand filtration, on which the sewerage committee will make a report in March. E. S. Horton, Chn. Com.; S. N. Holman, Secy.

BROCKTON, MASS.—The legislature has authorized this city to issue $100,000 in bonds for additional sewer construction, according to reports.

DEDHAM, MASS.—E. Worthington, Engr., writes us that the contract for furnishing about ten miles of 8 to 24-in. sewer pipe has been let to Waldo Bros., of Boston.

EAST HAMPTON, MASS.—The council is said to be considering the question of extending the outlet of its system to a point below Hampton Mills, at a cost of about $30,000.

NEWTON, MASS.—Reports state that Mayor Pickard has asked the legislature for permission to construct about 1,500 ft. of trunk sewer under the Charles River, between Newton Lower Falls and Newton Upper Falls.

TAUNTON, MASS.—The board of aldermen is considering the question of appropriating $100,000 for constructing sewer extensions, according to reports.

WAKEFIELD, MASS.—It is stated that the state board of health has approved the plans for the proposed system for this city.

WEBSTER, MASS.—The council is reported to be considering the question of building a system.

BRIDGEPORT, CONN.—We are informed that this city proposes to construct about 1,200 ft. of 60-in. brick sewers, specifications will probably be ready next month. C. E. Williams, Dir. Pub. Wks.; H. G. Scofield, Cy. Engr.

HARTFORD, CONN.—Bids are asked by the board of street commissioners until Feb. 27 for constructing a sewer in Wadsworth St. Joseph Butts, Pres. Bd.——The sewer commissioners are said to be considering the question of issuing $300,000 in bonds for sewer construction.

NEW YORK, N. Y.—Norton, Kirk & Baker, 215 W. 125th St., submitted the lowest bid Feb. 20, at $336,935, for building the Webster Ave. sewer, Queens; and Donovon Bros. are supposed to be the lowest bidders for the Richmond turnpike sewer.

BUFFALO, N. Y.—William Schumacher, 156 Dodge St., is said to have submitted the lowest bid at $39,898 to the board of public works for constructing the proposed sewer in Long Ave. and Newton St.

COHOES, N. Y.—We are informed that this city will construct about 6,000 ft. of 10-in. pipe sewers, to cost about $5,000. Edward Hayes, Engr. Pub. Impvt. Comn.

KINGSTON, N. Y.—We are informed that the council has adopted the plan for sewering the upper part of the city prepared by George N. Bell, Cy. Engr. The plan calls for over 25 miles of pipe sewers and a purification plant. The sewerage committee will report to the council the amount of work it may be advantageous to have done this year under one contract. It is probable that work will be started in April.

OSWEGO FALLS, N. Y.—The council is said to be considering the question of constructing a system.

HACKENSACK, N. J.—Bids are asked by the Hackensack Improvement Commission until March 4 for constructing a sewer in Prospect Ave., requiring about 650 ft. of 18-in. pipe, 630 ft. of 15-in. and 200 ft. of 12-in., as stated in our advertising columns. M. E. Clarendon, Pres.; Jacob Bauer, Secy.

HOBOKEN, N. J.—The council has asked for permission to issue $300,000 in bonds for sewer construction.

WOODBURY, N. J.—Wm. M. Carter, Cy. Engr., writes us that the council has passed the sewer ordinance, and the matter of construction will be taken up after the spring elections in March.

DELAWARE CITY, DEL.—We are informed that the following bids were received Feb. 15 by Capt. J. de L. Lafitte, Cons. Q. M., U. S. A., for constructing a system at Fort du Pont, as advertised in Engineering News: M. J. Fitzpatrick, Plattsburg, N. Y., $2,894; Rosser & Castoe, Bellaire, O., $6,600; John L. Gerety, Patchogue, N. Y., $6,750; L. O. Howell Co., Philadelphia, Pa., $3,960; Shreve & Company, Baltimore, Md., $4,980; A. L. Patterson & Co., Norfolk, Va., $5,250; Geo. W. Ruch, Philadelphia, Pa., $7,800; H. C. Clark, Delaware City, Del., $4,197; Thomas Monroe Ward, Baltimore, Md., $3,898.

SUMTER, S. C.—E. I. Reardon, Secy. Bd. of Health and Health Officer, writes us that he is circulating a petition by order of the board to order an election to vote on the question of issuing $30,000 in bonds for a system. There will be 30,000 ft. of 8-in. pipe, 20,000 ft. of 10-in., and 13,560 ft. of 12-in.; and all sewer pipe and junction is to be standard salt glazed, and the average depth, 10 ft.; one receiving well with automatic flush tank, 10,500 ft. of tile, 420 ft. of main carrier pipe, 100 manholes, 25 500-gallon flush tanks, etc. Dr. Reardon wishes to purchase an odorless pump and tank wagon for cesspool purposes. The city council wants estimates for 10,000 to 20,000 ft. of macadam paving in Main St., 6 ins. deep on sides and 10 ins. in center.

COLUMBUS, GA.—The council is said to have passed a resolution calling for a special election to vote on the question of issuing $125,000 in bonds for constructing a system.

DECATUR, ALA.—The legislature has passed a bill authorizing this city to construct a system.

KANKAKEE, ILL.—City Engineer Gregg, estimates the cost of constructing the proposed system from a point near Chestnut St. and Greenwood Ave., to the river, a distance of nearly a mile, at about $19,500.

MADISON, WIS.—The council is said to have let the contract for constructing a septic tank system to Blake & Co., at $7,020.

IOLA, KAN.—Burns & McDonnell, Postal Telegraph Bldg., Kansas City, Mo., have prepared plans and estimates for a system for this city.

GREAT FALLS, MONT.—The council is said to have appropriated $25,000 for the extension of the Sixth St. sewer.

OKLAHOMA CITY, OKLA. TER.—We are informed that the city will soon let contracts for laying from 12,000 to 15,000 ft. of new sewer main, also water mains, to cost in all about $50,000. Charles Chamberlain, Cy. Engr.

SACRAMENTO, CAL.—Sewer Commissioner Paine is said to have received plans for a sewage pumping plant.

KAMLOOPS, B. C.—The council has been asked to secure an engineer to prepare plans for a system, according to reports.

GARBAGE DISPOSAL—STREET CLEANING

NEW YORK, N. Y.—Bids are asked until Feb. 28 for raising the furnace or crematory of the department of street cleaning, located at Graham and Sherman Aves., Long Island City, and for constructing a foundation. P. E. Nagle, Comr., Park Row Bldg.

ATLANTIC CITY, N. J.—Amos W. Barnes, Consult. Engr., 9th and Walnut Sts., Philadelphia, writes us that the following bids were received Feb. 11 for work on the crematory, as noted in our issue of Jan. 24, bidders of Philadelphia, except Cox & Sons Co. All foundations and flue work up to ground floor line, together with cast columns, platform beams, concrete floors and railings complete and reconstruction of top of present incline driveway: Cramp & Co., 1421 Filbert St., $14,715; Henderson & Co., 1215 Filbert St., $15,400; M. P. Wells & Co., 1420 Chestnut St., $18,118; Machin & Brown, 147 N. 7th St., $13,887. Gas producer, furnaces, chambers, overhead and connecting flues, stacks, valves and gas producer doors and grate bars complete: The Cox & Sons Co., Bridgeton, N. J., $22,195; Henderson & Co., 1215 Filbert St., $17,900; Machin & Brown, 147 No. 7th St., $12,137.

ELGIN, ILL.—The council is reported to have appropriated $5,000 for a garbage crematory.

WAUKESHA, WIS.—Bids are asked until March 2 for furnishing two 600-gallon street sprinklers, with platform springs, spray sprinkler heads and interchangeable parts, and to be delivered in 40 days. Walter Hartshorn, Cy. Comptroller; J. R. Dey, Chn. Bd. Pub. Wks.

CONTRACT PRICES.

VALVES, WATER PIPE, ETC.—New York, N. Y.—The water commissioners received the following bids Feb. 14, 1901, for valves, hydrants, pipe, etc.: (1) Sylvester N. Leary, Eagle Ave. and Newtown Creek; (2) Kennedy Valve Co., 57 Beekman St.; (3) John Fox & Co., 253 Broadway; (4) 700 short tons of straight pipe; (5) 50 tons of special castings:

		1.	2.	3.
12-in. gates, inside screw,	30 each.	$41.00	$46.50	$39.40
12-in. " outside screw	10 "	43.00	32.00	22.75
6-in. "	100 "	11.00	14.80	11.00
4-in. "	20 "	7.50	8.75	7.50
Hydrants: Single	100 "	12.25	14.75	12.25
Double A	50 "	14.75	17.00	16.00
No. 1.	150 "	10.50	12.10	10.65
Boxes	500 "	1.90	1.94	1.85
Gate boxes, No. 1.	50 "	11.50	13.00	11.75
No. 2	200 "	9.50	10.25	9.75
No. 3.	200 "	8.30	8.95	8.35
Total		$13,308	$13,940	$13,360

	4.	5.	Total.
Warren Fdry & Machine Co., New York	$21.20	$44	$17,040
Camden (N. J.) Iron Works	21.08	45	17,006
M. J. Drummond, 192 Broadway, N. Y	20.65	45	16,705
U.S. C.-I. Pipe & Fdry Co., New York.	20.40	42	16,380
J. Fox & Co., 253 Broadway, New York	20.75	41	16,575

WATER SHAFTS AND TUNNEL.—Cleveland, O.—We are informed that the following bids were received Feb.13, 1901, by the water-works department for building shafts and tunnels for Elm St.; M. W. Kingsley, Supt.:

Bidder.	Shafts No.1, 66 ft.	Shafts No.2, 68.1 ft.	Tunnel, 365 ft.	Total.
John Potts & Co.	$44.00	$44.00	$15.31	$11,489
Beers & Doolittle	48.25	48.25	18.25	13,132
F. E. Gribben (lump bids).	4,570	4,360	14.75	14,314
J. Connelly & Son	63.00	60.00	18.25	14,905
D. & G. Griese	55.45	50.60	25.10	16,267
A. F. Helm	98.00	76.00	17.25	17,940
C.H. Fath & Son Cnstn Co.	89.00	86.00	25.00	20,856
John Gill & Sons	97.50	100.00	27.50	23,283
The Reaugh Const'n Co.	110.00	110.00	32.00	26,431

PUMPING ENGINE.—Atlantic City, N. J.—The following bids were received by the water department Feb. 11 for furnishing and installing a 3,000,000-gallon pumping engine, as advertised in Engineering News; W. C. Hawley, Supt.; the life of the engine is assumed at 20 years:

Bids Received at Atlantic City, N. J., Feb. 11, 1901, for a Pumping Engine.

Items.	d'Auria Pumping Eng. Co., Philadelphia. A.	H. R. Worthington, Brooklyn, N. Y. B.	C.	D.	Barr Pumping Eng. Co., Philadelphia. E.	The Snow Steam Pump Works, Buffalo. F.	M. T. Davidson, Brooklyn.	Laidlaw-Dunn-Gordon Co., Cincinnati.
Class of pump	10×20×12	9×14×22×15	12×24×15		14×28×12	15×30×13	12×18×13½	14×18.9
Size, ins.	40,000	33,000	55,200		95,000	66,800	.....	98,000
Weight, lbs.	18 ins.	18 ins.	18 ins.		24 ins.	18 ins.	24 ins.	24 ins.
Length of stroke	59; 177.2'	40; 120'	40; 120'		45	52; 155'	47 to 65	55; 220'
Piston speed per min.: Revolutions	90	110	110		100	110	120	130
Time to complete, days								
Guaranteed duties:								
Full capacity, ft.-lbs.	100,000,000	90,000,000	105,000,000		100,000,000	95,000,000	120,000,000	95,000,000
Three-fourths capacity, ft.-lbs.	93,000,000	80,000,000	95,000,000		85,000,000	90,000,000	.....	85,000,000
One-half capacity, ft.-lbs.	85,000,000	70,000,000	85,000,000		75,000,000	80,000,000	.....	75,000,000
Average duty,* ft.-lbs.	94,500,000	82,500,000	97,500,000		90,000,000	90,000,000	.....	87,500,000
Price bid for engine	$6,500	$7,200	$11,600		$10,200	$12,300	$11,000	$11,900
X—Annual cost of excess cost for 20 years.†	.....	$49.00	$357.00		$259.00	$406.00	.....	$378.00
Inc. or dec. coal burned yearly, as compared with d'Auria engine‡	.....	— 77.22	+ 16.34		— 26.55	— 26.55	.....	— 42.47
Y—Value inc. or dec. coal burned§	.....	— $212.36	+ $44.92		— $73.00	— $73.00	.....	— $116.80
X + Y =	.....	$261.36	$312.08		$332.00	$479.00	.....	$494.80
Value of X and Y:								
End of 20 years, at 3%	.....	$7,022.74	$8,385.59		$8,920.84	$12,870.73	.....	$13,295.28
Present value at 3%	.....	3,889.04	4,643.75		4,940.16	7,127.52	.....	7,362.62
Corrected price of engine	$6,500.00	$11,089.04	$16,243.75		$15,140.16	$19,427.52	.....	$19,262.62

*On assumption that engine will be operated full capacity half of time; three-fourths capacity quarter of time, and one-half capacity quarter of time. †Interest at 3½%, sinking fund at 3½%; total, 7%. ‡Figures given are tons. §At $2.75 per gross ton.

Class of Pump: A—Duplex, compound, condensing d'Auria; B—Tripie expansion, condensing; C—High-duty compound, condensing; D—Cross-compound, crank and flywheel, condensing; E—3-cylinder, compound, crank and flywheel engine, single-acting plungers; F—Same as E, but with double-acting plunger. The Snow Steam Pump Work's bid does not include foundation. Laidlaw-Dunn-Gordon Co. sent no detail specifications with bid.

BRICK AND PIPE SEWERS.—Allegheny, Pa.—The following contracts have been let for constructing brick and pipe sewers in certain streets: Robt. Dilworth, Cy. Clk.; Jas. G. Wyman, Mayor: Marshall Ave. to the North Side Coal & Sand Co., 1,900 ft. of 36-in. brick sewer, $4.43 a ft.; 3,400 ft. of 9-in. connections, 49 cts. a lin. ft.; 10 No. 1 inlets, $33 each; 10 manhole shafts, $23 each; total, $10,643. Brighton Road and Winthrope St., also to the No. S. C. & T. Co., 1,200 ft. of 20-in. D. S. pipe sewer, $1.48 a lin. ft.; 1,600 ft. of 18-in. D. S. pipe sewer, $1.23; 200 ft. of 15-in. D. S. pipe sewer, $1.12; 6,000 ft. of 9-in. connections, 45 cts.; 14 No. 1 inlets, $32 each; 15 manhole shaft, $22 each; total, $7,460. Brighton Road, Saml. Gamble, 800 ft. of 18-in. D. S. pipe sewer, $1.18; 1,400 ft. of 15-in., $1.02; 2,300 ft. of 9-in. connections, 39 cts.; 6 No. 1 inlets, $25 each; 10 manhole shafts, $25 each; also secured contract at $2.234 for an 18 and 15-in. pipe sewer in another section of Brighton Road.

GRADING—Greensboro, N. C.—J. M. Bandy, Cy. Engr., writes us that Stewart Bros., of Rock Hill, S. C., have been awarded the contract at 16 cts. a cu. yd. for earth street grading, 30 cts. for loose rock and 60 cts. for solid rock. Bids are wanted at once for 16,000 sq. yds. of brick or asphalt paving. As soon as the weather permits a large amount of work will be undertaken.

BRICK SEWER.—Toledo, O.—We are informed that the following bids were received Jan. 7 for furnishing the materials and for constructing sewer 783 in Treadwell St., from Maumee River, etc.; all bidders of Toledo; bid of T. J. Kelly accepted; Willis F. Brown, Cy. Engr.:

Bids Received at Toledo, O., Jan. 7, 1901, for Materials and for Constructing a Brick Sewer.

Quantities.	Patrick Kelly, No. 635	J. Deg-nan, No. 636	T. J. Kelly, No. 626	Jas. Gates, Adams & Erie Sts.	J. J. Stone, 2220 Franklin Ave.	J. H. Horan, The Valentine.	H. J. Bower, Western Ave.	J. B. O'Neill, 622 Avndle Ave.	John McMahon, 825 Colfax St.	O'Sullivan & Sheehan, Oak and 1st Sts.
Brick sewer:	Avondale Ave.									
72-in.: 13-in. shell.100 lin. ft.	$6.50	$6.60	$5.00	$7.00	$7.00	$7.25	$15.00	$8.00	$6.95	$7.23
9-in. shell .... 40 " "	5.50	5.80	4.80	6.00	5.28	5.75	14.00	5.00	6.00	5.77
54-in.: 13-in. shell.300 " "	6.00	6.00	4.37	5.65	5.28	6.00	12.00	4.90	5.00	5.70
9-in. shell ...1,014 " "	4.50	5.20	4.37	5.50	3.96	5.00	10.00	4.86	4.50	4.10
48-in.: 13-in. shell.300 " "	5.00	5.70	4.10	5.40	4.80	5.00	9.00	4.42	4.50	4.99
9-in. shell .....450 " "	4.00	4.70	4.10	5.30	3.60	4.00	6.00	4.32	4.00	4.00
36-in.: 13-in. shell.300 " "	4.00	4.00	2.75	4.60	3.60	4.25	7.00	3.30	3.50	4.00
9-in. shell .....491 " "	3.00	3.70	2.70	4.50	2.70	3.25	6.00	3.24	3.00	3.55
30-in.: 13-in. shell.100 " "	3.00	3.00	2.17	4.15	3.30	3.90	5.00	2.70	2.75	3.49
9-in. shell .....241 " "	2.50	2.80	2.17	4.05	2.40	2.65	3.00	2.70	2.50	2.44
Pipe sewer:										
24-in., incldg Ys...791 " "	1.90	1.70	1.60	2.95	1.85	1.85	3.00	2.00	1.96	2.98
15-in. (connect'ns).125 " "	.85	.78	.85	1.15	1.00	1.15	1.00	1.20	1.25	1.28
12-in. " .275 " "	.75	.65	.60	1.00	.78	.95	.90	1.00	1.00	.98
Manholes, in place... 11 each	25.00	35.00	20.00	30.00	40.00	32.00	30.00	30.00	30.00	25.00
Catchbasins, complete 11 "	45.00	45.00	40.00	40.00	47.00	70.00	40.00	50.00	50.00	50.00
Bulkhead, complete	168.00	225.00	120.00	245.00	200.00	250.00	100.00	150.00	180.00	200.00
Cradle ..... 75 lin. ft.	2.50	3.25	2.50	3.00	3.00	3.50	4.00	2.75	3.50	3.00
Extra sand	5.00	10.00	4.00	4.00	4.00	4.00	5.00	4.00	6.00	5.00
Brick, per 1,000	12.00	12.00	18.00	15.00	12.00	16.00	12.00	20.00	15.00	12.00
Concrete ..... 69 cu. yds.	2.50	2.35	2.25	3.00	5.00	4.90	2.00	3.00	5.00	4.00
Earth fill .....180 " "	.15	.55	.10	.15	.16	.17	.20	.15	.25	.35
Dry masonry wall.... 20 " "	2.75	5.25	2.75	3.50	3.20	3.50	2.00	4.50	6.00	3.00
Total	$17,321	$19,140	$15,139	$21,513	$16,523	$18,986	$31,816	$17,761	$17,384	$17,739

STREETS AND ROADS.

BUFFALO, N. Y.—Bids are asked by the board of public works until Feb. 27 for paving Triangle Place, and Bardol and Speiss Sts. R. G. Parsons, Secy. Bd.

SYRACUSE, N. Y.—We are informed that the following paving work for the year is proposed or under contract. H. T. Beach, Consult. Engr.: Under contract—McBride St., James to Canal, vitrified brick, bevel edge, 3,700 yds., Dec. 19, 1899, at $11,020, and Clark St., North Geddes St. east, vitrified brick, bevel edge, 1,050 yds., Aug. 1, 1899, at $3,094; J. W. Bustin, Contractor. Ordered—Harrison St., University Ave. to Walnut Place, land asphalt, 1,200 yds.; Walton St., Clinton to West, brick and asphalt or asphaltina, 3,900 yds.; W. Fayette, West to Niagara, asphalt, asphaltina or brick, 3,500 yds.; N. West, W. Genesee to Belden, Wallace, Noxon to Mechanic, Mechanic, Wallace to Franklin, asphalt, asphaltina or brick, 3,500 yds.; Belden Ave., Franklin to Maltbie, Wallace, Noxon to Belden Ave., asphalt, asphaltina or brick, 8,900 yds.; Pearl, Salina to Belden Ave., Belden Ave., Salina to Pearl, Public Market, Salina to Pearl, brick, 4,100 yards; Belden Ave., Sand to Geddes, asphalt, asphaltina or brick, 2,700 yds.; Jefferson, Clinton to West, asphalt or brick, 7,500 yds.; Canal St., State to Pearl, Pearl, Canal to Willow, asphalt or brick, 2,300 yds.; Warren, James to Willow, Willow, Salina to Oswego Canal, asphalt or brick, 2,600 yds.; Gifford, Clinton to Geddes, brick or sheet asphalt, 16,500 yds.; Euclid Ave., College Place to Westcott St., brick and sheet asphalt, 13,000 yds. The above ordered work will probably be let in March. Lettings are made on five days' notice in local papers.

EAST ORANGE, N. J.—Wm. H. V. Reimer, Cy. Engr., writes us that the council has passed ordinances providing for the improvement of Bedford St., about 1,700 ft. long, and Tremont Ave., about 4,000 ft.

RIVERSIDE, N. J.—Bids are asked until March 11 for grading and macadamizing about four miles of streets in this borough, as stated in our advertising columns. J. H. Weston, Boro. Clk.

MILFORD, MASS.—The council is said to be considering the question of paving Main St. M. E. Nelligan, Supt. Streets.

WEST HOBOKEN, N. J.—Bids are asked until Feb. 28 for improving Smith Ave. and Danielson St., in North Bergen Township. Emil Toerch, Town Clk.—The council has passed an ordinance providing for the improvement of Newkirk St.; Chas. Dietz, Chn.

BELLEVUE, PA.—Bids are asked until Feb. 25 for paving the following streets: Thomas Ave., requiring 3,000 cu. yds. of grading, 6,070 sq. yds. of paving and 3,500 lin. ft. of curbing; Sheridan Ave., requiring 4,460 cu. yds. of grading, 5,760 sq. yds. of paving and 4,208 lin. ft. of curbing. G. L. Hays, Chn. Street Com.; Edeburn, Cooper & Co., Boro. Engrs., 410 Grant St., Pittsburg.

PORTSMOUTH, VA.—Bascom Sykes, Cy. Engr., writes us that the recent bond issue of $50,000 will be spent in the Fifth Ward next season in paving the gutters with granite blocks, setting curbs and paving sidewalks.

ATHENS, GA.—Press reports state that the question of macadamizing Milledge Ave., is being considered.

RICHMOND, VA.—We are informed that no appropriation has as yet been made for paving Tredegar St. W. E. Cutshaw, Cy. Engr.

SUMTER, S. C.—Bids are asked at once, by the city clerk for constructing from $10,000 to $20,000 sq. yds. of macadam roadway. C. M. Hurst, Cy. Clk.

MONTGOMERY, ALA.—The legislature has passed a resolution authorizing this city to issue bonds for paving.

JACKSONVILLE, FLA.—Bids are asked until March 28 for constructing 13,195 sq. yds. of brick pavement, to cost about $23,427. Philip Priolcau, Cy. Engr.

TAMPA, FLA.—Bids are asked by the board of public works until Feb. 27 for paving a number of streets. W. B. Henderson, Pres.

BIRMINGHAM, ALA.—The council has passed ordinances providing for the paving and improving of a number of streets. H. D. Wood, Cy. Clk.; W. M. Drenner, Mayor.

BATAVIA, O.—Bids are asked until Feb. 23 for constructing about 6½ miles of county roads. H. P. Williams, Auditor.

CINCINNATI, O.—Bids are asked until March 2 for improving Summit Ave. Eugene L. Lewis, County Audr.

MARION, O.—Bids are asked until March 16 for paving Prospect St., requiring about 2,800 cu. yds. of grading, 3,290 ft. of straight curb, 6,210 sq. yds. of patented grout

or Portland cement filler, and 6,210 sq. yds. of paving, also for paving Greenwood St., requiring 3,885 sq. yds. of brick or block pavement. James S. Beatty, Cy. Clk.; E. S. Ault, Cy. Engr.

TOLEDO, O.—Bids are asked until March 4 for paving Utica St. John E. Connell, Cy. Clk.

GARRETT, IND.—Bids are asked until March 5 for paving Randolph St., with brick, requiring about 11,000 cu. yds. of excavation, 27,000 sq. yds. of pavement, 10,400 lin. ft. of curb, etc. J. J. Van Auken, Engr., Auburn; F. J. Loar, Cy. Clk.

QUITMAN, GA.—Joseph Tillman, Quitman, writes us that he wishes to interest parties understanding the operation of mills who can furnish half the cost of building a plant for the manufacture of hosiery underwear.

JACKSON, TENN.—The Jackson Ice Co. has been incorporated with $20,000 capital stock. The company will purchase the plant of the Tennessee Ice Co. and make extensive alterations and improvements to it. Gilbert D. Raine, Memphis, is interested.

MEMPHIS, TENN.—The plant of the Foster-Robinson Gin Co. was destroyed by Fire on Jan. 23.; loss, $27,000.

KANSAS CITY, MO.—The contract has been let for Burham, Hanna, Munger & Co.'s new factory building in this city, to Geo. L. Brown & Co., Kansas City. The building will cost about $300,000.

CONTRACT PRICES.

PIPE SEWERS.—Greenwich, Conn.—We are informed that the following bids were received Feb. 11 for furnishing the materials and for constructing about 2 miles of sewers, and 494.9 ft. of tunnel, as advertised in Engineering News:

Bids Received at Greenwich, Conn., Feb. 11, 1901, for Materials and for Constructing Two Miles of Sewers.

Quantities.	David M. Rosser, Kingston, Pa.	Jos. Christiano, Greenwich, Conn.	M. Decicco & Co., Larchmont, N. Y.	Harry L. Smith, Long Island City.	Peter Sweeney, Danbury, Conn.	Baker & Judson, Gloversville, N. Y.	Alex. S. Traub, New York City.	M'Cabe & Duffy, White Plains, N. Y.	Bellew & Merritt, Tuckahoe, N. Y.	J. L. Gerety, Patchogue, L. I.	C. H. Eglee, Boston, Mass.	W. H. Jackman, White Plains, N. Y.	Foley & Coughlan Boston, Mass.
12-in. vitrified pipe .....7,700 lin. ft..	$0.55	$0.68	$0.55	$0.66	$0.75	$0.70	$0.70	$0.74	$0.79	$1.05	$0.96	$1.30	$1.21
10-in. " " .....2,000 " "	.50	.62	.50	.60	.65	.65	.65	.68	.59	.95	.88	1.25	1.17
12 × 6-in. Y's or spurs..... 190 " "	.50	1.40	1.15	1.03	.60	.80	.50	2.20	.73	.40	.77	.24	.80
10 × 6-in. Y's or spurs..... 65 " "	.45	1.25	.90	.89	.50	.60	.40	2.00	.60	.35	.59	.20	.76
Manholes ..... 29 each...	42.00	46.00	36.50	50.00	37.00	45.00	40.00	42.00	66.48	40.00	45.00	50.00	50.00
Special manhole at Shaft No. 1.....	236.00	215.00	240.00	165.00	190.00	100.00	236.00	165.00	311.00	100.00	250.00	180.00	180.00
Special manhole at Shaft No. 2.....	146.00	134.00	115.00	165.00	100.00	80.00	150.00	82.00	161.00	65.00	150.00	95.00	90.00
12-in. cast-iron pipe in tunnel..... 500 lin. ft..	1.26	1.65	1.40	1.70	1.80	2.00	1.50	1.90	1.29	1.20	2.50	1.50	2.25
12-in. " " (Putnam Av.) 72 " "	5.00	1.50	5.00	2.75	1.80	1.50	4.00	8.00	22.11	1.20	5.00	4.00	9.75
12-in. " " other points. 264 " "	1.10	1.40	1.25	1.59	1.80	1.75	2.00	2.20	1.39	1.15	4.00	2.50	2.25
10-in. " " brook cr'ss'gs 24 " "	1.00	1.10	1.25	1.33	1.80	1.50	1.50	2.00	1.40	1.25	3.75	2.00	2.00
Rock excavation .....2,500 cu. yds.	2.50	1.90	2.75	2.25	2.70	2.75	3.00	2.94	2.58	2.60	2.50	2.00	3.50
Cement rubble masonry..... 100 " "	4.25	3.50	4.00	5.75	3.50	5.00	4.50	4.00	5.00	7.50	4.00	6.00	5.00
Concrete ..... 10 " "	7.00	7.00	5.00	6.00	6.50	8.00	7.00	4.50	6.00	7.50	4.00	10.00	6.00
24-in. drain ..... 200 lin. ft..	1.18	1.35	1.50	1.50	1.45	1.50	1.00	1.80	.98	.75	1.20	1.50	1.75
6-in. drain ..... 225 " "	.35	.25	.30	.35	.20	.50	.15	.50	.27	.20	.50	.30	.30
Total	$15,323	$15,332	$16,038	$16,454	$17,634	$17,840	$18,213	$19,493	$19,745	$19,949	$20,840	$22,107	$25,775
Bid on tunnel .....494.9 lin. ft..	$15.75	$12.00	$12.50	$9.00	$14.10	.....	.....	.....	$26.90	.....	$19.00	.....	.....

PEORIA, ILL.—H. E. Beasley, Cy. Engr., informs us that action on the paving of St. James St., has been withheld for the present.

PONTIAC, ILL.—We are informed that this city will construct about 30,000 sq. yds. of brick pavement this summer. P. C. Knight, Engr.

MARINETTE, WIS.—Bids are asked until March 5 for about 3,785 sq. yds. of 9-in. macadam paving, 2,000 lin. ft. of stone curbing and 1,300 cu. yds. of excavation. A. L. Hillis, Cy. Engr.

WAUKESHA, WIS.—Bids are asked by the board of public works until March 2 for macadamizing West Ave. W. Hartshorn, Comptroller.

DES MOINES, IA.—Bids are asked by the board of public works, until March 5 for paving Mary Ave., Second and Depot Sts., with brick, requiring about 3,300 sq. yds. of pavement.

PETALUMA, CAL.—The board of public works has passed a resolution of intention to pave Howard, Kentucky and Main Sts. E. S. Shaver, Supt. Streets.

BRANTFORD, ONT.—Bids are asked until Feb. 28 for furnishing a 15-ton road roller. H. F. Leonard, Cy. Clk.

VANCOUVER, B. C.—Bids are asked until March 1 for furnishing a rock crusher with a capacity of from 30 to 40 tons per hour, and a 15-ton steam road roller. Thomas H. Tracy, Cy. Engr.

LOUISVILLE, KY.—The Monarch Tobacco Works has been incorporated with $150,000 capital stock. The company will build a large plant in the western part of this city. The plant will employ about 1,600 hands. John Doerhoefer, Louisville, and Ed. J. Coggershell, West Point, are interested.

LOUISVILLE, KY.—We are informed that a mill to make Portland cement by the dry process will be built within 50 miles of Louisville. It will have at first a capacity for 1,000 bbls. a day, which will later be increased to about 6,000 bbls., and the same parties will also build a 1,000-bbl. plant at Milford, Ind., where they own 1,000 acres of marl lands. The interested parties are P. F. Miles, of Milford, Ind.; Edwin T. Allan, of the Russell Wheel & Foundry Co., Detroit, Mich.; B. H. Rothwell, Chamber of Commerce Bldg., Detroit, and P. L. Foulk, of Cleveland, O.

DETROIT, MICH.—Reports state that plans are being prepared by F. P. Allen & Son, Archs., Grand Rapids, for a manufacturing plant for the Fred Mason Co. The main building will be 300 × 640 ft., two stories high, and the entire plant will cost $150,000.

DETROIT, MICH.—The American Blower Co. expects to begin operations in the early spring upon extensive additions to its plant, including a large addition to the steel plate fan erecting shop. This will be of steel construction throughout. A new blacksmith shop, storage warehouse and power house will be erected. The power house will be equipped with new boilers, engines, dynamos, mechanical draft apparatus, etc., all of the latest design. The entire plant will be remodeled, rearranged and equipped throughout with new cranes, hoists, etc. A commodious and well-appointed wash room and locker will be provided for the men.

NORWALK, O.—The Norwalk Ice Co. has been incorporated with $10,000 capital stock. The company expects to erect large ice houses in this vicinity. C. F. Jackson and C. D. Miles are interested.

WAVERLY, ILL.—Press reports state that the citizens of this place will rebuild the mill of the Kauffman Milling Co., of St. Louis, recently destroyed by fire.

CEDAR RAPIDS, IA.—The Cedar Rapids Artificial Feather Co. will build a plant here in the spring for the manufacture of mattresses, sofa pillows, etc. R. C. Hayner, Mgr.

ST. JOSEPH, MO.—Fire damaged the Krug Packing Co.'s plant, in this place, to the extent of about $25,000 on Feb. 3.

INSULATORS.—Washington, D. C.—The following bids were received by Gen. A. W. Greely, Ch. Signal Officer, War Dept., Washington, last week for furnishing, (1) 100,000 Western Union Double P. insulators, and (2) 40,000 pony insulators, New York and Washington delivery: Western Electric Co., Chicago, (1) $44.93 Washington and $47.93 N. Y. delivery; (2) $19.84 D. C. and $20.96 N. Y.; Brookfield Glass Co., 220 Broadway, New York, (1) $45.85 and $48.35, (2) $20.25 and $21.37; Jas. S. Barron & Co., Hudson and Duane Sts., New York, (1) $42.85, (2) $18.25, either delivery; Manhattan Electrical Supply Co., 32 Cortlandt St., New York, (1) $44.93 and $47.93, (2) $19.84 and $20.96; Barber & Ross, Washington, D. C., (1) $45.80 and $48.35, (2) $20.20 and $21.42, New York and Washington delivery respectively.

DREDGING.—Boston, Mass.—We are informed that the Bay State Dredging Co., 19 High St., Boston, submitted the lowest bid Feb. 14, 1901, to the Board of Harbor and Land Comrs., at 25 cts. a cu. yd. for 47,000 yds. of dredging in Fort Point Channel, the material to be taken to sea. The Eastern Dredging Co., 25 Congress St., Boston, submitted the only other bid at 25¾ cts.

TRENCHING AND LAYING WATER PIPE.—Wallington, N. J.—The following bids were received Feb. 11 for trenching and laying about 6½ miles of water pipe, and for hauling, etc., as advertised in Engineering News; Wise & Watson, Engrs., 34 Bloomfield Ave., Passaic, N.J.:

BIDS RECEIVED AT WALLINGTON, N. J., FEB. 11, 1901, FOR TRENCHING AND LAYING WATER PIPE.

Quantities.	Watson, Vredenburg, Jr., & Co., New York.	N. J. Constn. & Supply Co., Garfield, N.J.	Stone & Thurston, New York, N.Y.	Beckwith & Quackenbush, Mohawk, N.Y.	Robert Cook, Wallington, N.J.	Union Bldg. & Constn. Co., Passaic, N. J.	Rafael Cortese, Paterson, N. J.	Lanzillo & Tighe, East Orange, N.J.	Philip Tumulty, Jersey City	P. T. Plunkett, Jersey City	Bolton G. Coon, Kingston, Pa.	John Cornwell, Jr., New York, N.Y.	John Collins, Passaic, N. J.
Trench, 0 to 3 ft. .....9,500 lin. ft..	$0.067	$0.04	$0.07	$0.06	$0.05	$0.068	$0.033	$0.06	$0.16	$0.10	$0.07	$0.06	$0.07
" 3 " 4 " .....15,000 " "	.078	.045	.09	.08	.07	.09	.05	.08	.16	.11	.08	.08	.16
" 4 " 5 " .....7,500 " "	.10	.06	.14	.09	.13	.12	.077	.08	.16	.17	.11	.10	.14
" 5 " 6 " .....3,202 " "	.16	.08	.16	.15	.13	.1225	.092	.09	.22	.23	.16	.15	.15
" over 6 ft. ..... 500 " "	.235	.10	.18	.50	.25	.20	.132	.14	.22	.25	.20	.20	.17
Rock trench ..... 725 " "	.22	.25	.50	.35	...	.20	.055	.07	.20	.30	.08	.30	.16
Embankment, 3 ft. high..... 500 " "	.15	.20	.30	.08	...	.11	.04	.06	.10	.25	.05	.30	.20
2-in. galvanized wrought-iron pipe. 5,700 " "	.21	.21	.27	.25	.30	.21	.21	.195	.34	.25	.20	.24	.235
Laying 3-in. cast-iron pipe..... 1,725 " "	.03	.0925	.06	.06	.04	.05	.03	.04	.06	.08	.05	.05	.05
" 4-in. " " .....10,952 " "	.04	.095	.07	.07	.04	.06	.036	.05	.075	.09	.065	.07	.06
" 6-in. " " .....13,825 " "	.06	.105	.085	.08	.04	.07	.074	.09	.081	.10	.095	.10	.08
" 8-in. " " ..... 4,325 " "	.08	.125	.105	.10	.07	.08	.095	.10	.108	.15	.11	.14	.11
" 10-in. " " ..... 400 " "	.11	.14	.125	.12	.10	.09	.15	.13	.12	.20	.15	.16	.125
Hydrants, set ..... 30 each...	1.50	4.00	3.50	1.60	3.00	2.00	1.00	1.00	4.80	5.00	1.50	3.00	2.50
3-in. gate-valves, set ..... 4 " ...	.50	2.00	1.50	1.00	1.38	.75	.25	.50	4.60	2.00	.50	3.00	.85
4-in. " " ..... 24 " ...	.75	2.25	1.50	1.25	1.38	1.00	.30	1.00	4.60	2.00	.50	3.00	.95
6-in. " " ..... 32 " ...	1.00	2.50	2.00	1.50	1.38	1.60	.70	1.00	5.80	2.00	.50	3.00	1.10
8-in. " " ..... 14 " ...	1.25	3.00	2.00	1.50	1.38	1.85	.90	1.50	5.80	2.00	.75	4.00	1.95
10-in. " " ..... 3 " ...	1.50	3.50	2.00	2.00	1.38	2.25	1.10	1.75	5.80	2.00	1.00	5.00	2.00
Relaying paving ..... 50 sq. ft...	.10	.50	.20	.10	.02	.10	.05	.01	.10	.05	.10	.25	.02
Restoring macadam ..... 6,400 sq. yds.	.07	.12	.20	.12	.02	.10	.25	.02	.10	.09	.10	.25	.05
Total	$6,955	$7,067	$9,810	$8,279	$6,627	$7,701	$6,890	$6,546	$11,973	$10,828	$7,986	$9,793	$9,141
2-in. gate-valves, set ..... 16 each...	$3.25	$0.25	$1.00	$1.00	$1.38	$0.50	$0.10	$0.15	$4.60	$2.00	$0.10	$4.00	$0.15
Overhaul per 100 ft. ..... 350 cu. yds.	.01	.05	.02	.02	.01	.01	.05	.10	.20	.50	.05	.10	.10

MANUFACTURING PLANTS.

TROY, N. Y.—The shops of the Boston & Maine R. R., at Mechincaville, were destroyed by fire on Feb. 11; loss estimated at $60,000.

PHILADELPHIA, PA.—Bids are wanted by the Pennsylvania Ice Co., 602 Fidelity Bldg., for building and equipping a 150-ton can plant to be erected in this city.—The contract for an addition to the plant of Henry Disston & Sons, on Urrah St., 42 × 30 ft., has been let to Michael Magee.

ROCHESTER, PA.—The plant of the Rochester Tumbler Works of the National Glass Co., located here, was destroyed by fire on Feb. 12, causing a loss of about $500,000.

ATLANTA, GA.—Application has been made for a charter for Atlanta Steel Hoop Co., with $50,000 capital stock, which company proposes to build an iron and steel plant for the manufacture of steel hoops and cotton tie pig-iron. The company will also establish an electric light plant. C. E. Currier, G. W. Connors and S. T. Weyman are interested.

The bid of Robert Cook was informal. Lanzillo & Tighe were awarded the contract. The bids for haulage and distributing pipe, etc., of which (1) is for 450 tons of cast-iron pipe and specials, (2) for 30 hydrants, and (3) for 93 gate-valves, are as follows:

	1.	2.	3.	Total.
K. Haselhahn, Rutherford, N.J...	$0.74	$0.25	$0.20	$359.00
Watson, Vredenburg, Jr. & Co...	.60	.25	.05	282.00
N. J. Const'n & Supply Co.....	.56	.30	.20	280.00
Stone & Thurston.....	.75	.50	.25	376.00
Beckwith & Quackenbush	.50	.50	.50	287.00
Richard Sann, Carlstadt, N. J....	50	.25	.25	256.00
S. Steinberg, Passaic, N. J.....	.47½	.25	.50	268.00
Robert Cook (accepted).....	.45	.15	.10	216.00
Union Bldg & Const'n Co.....	.55	.50	.15	266.00
Rafael Costeso, Paterson.....	.55	.20	.12	265.00

DAM, ETC.—Troy, N. Y.—We are informed that the following bids were received Feb. 8 for constructing a diverting dam and reservoir near Quackenkill, for the proposed extension to the water-works; E. R. Cary, Cy. Engr.; John Phelan, Comr. Pub. Wks.:

Bids Received at Troy, N. Y., Feb. 8, 1901, for Constructing Dam near Quackenkill, N.Y.

Bidder.	Grubbing and clearing, 3.4 acres.	For dam: Excavation: Earth, 630 cu. yds.	For dam: Excavation: Rock, 610 cu. yds.	For dam: Earth embnkmt, 775 cu. yds.	For road: Excavation: Earth, 1,710 cu. yds.	For road: Excavation: Rock, 385 cu. yds.	In place: Concrete, 1,065 cu. yds.	In place: Dry wall, 32 cu. yds.	In place: Pavement, 195 sq. yds.	In place: Slope wall, 80 sq. yds.	Wrought iron, 5,600 lbs.	Sluice gates, 2.	Gate houses, 2.	Setting gates & laying pipe, 160 ft.	Total.
Nelson, Fitzgerald & Horne, Hoosick Falls, N.Y.	$1,029.41	$1.30	$3.40	$2.60	$0.61	$3.45	$6.75	$1.63	$7.80	$6.50	$0.13	$690.00	$585.00	$625.00	$20,206
Peter Lafontaine, Plattsburg, N. Y.....	54.00	.60	1.75	1.50	.75	1.75	5.45	3.25	1.40	1.60	.09	223.60	800.00	195.00	13,380
Oscar D. Gilfoil, Burlington, Vt.	100.00	.90	2.00	.60	.30	1.10	7.00	5.00	1.25	1.70	.06	600.00	400.00	200.00	13,059
Gleason, Kiley & Co., Syracuse, N. Y.....	500.00	.35	1.25	.55	.35	1.25	5.00	2.00	1.00	1.25	.05	425.00	1000.00	130.00	11,710
Frank Pidgeon, Saugerties, N. Y.....	100.00	.60	1.75	.60	.35	1.65	6.00	3.00	1.50	2.00	.10	300.00	225.00	250.00	11,508
P. H. Harrison Sons Co., Newark, N. J.....	25.00	1.00	1.00	1.00	.50	1.00	5.00	2.00	2.00	2.00	.10	400.00	350.00	300.00	10,869
Ellis Bros., Troy, N. Y.....	400.00	.50	1.25	.50	.30	1.00	4.40	2.00	2.00	3.00	.07	300.00	600.00	300.00	10,695
Harrington & Besch, Troy, N. Y.....	20.00	1.19	1.19	.50	.38	2.00	4.68	4.80	.75	1.00	.06	280.00	160.00	65.00	9,554
John R. Briggs, Fonda, N. Y.....	50.00	.41	1.50	.54	.26½	1.50	4.47	2.00	.60	.65	.06	100.00	400.00	150.00	8,668
Michael McDonough, Troy, N. Y.	80.00	.25	1.40	.40	.35	1.00	3.90	3.00	.60	.60	.07	290.00	600.00	110.00	8,384
E. H. McKenna, Troy, N. Y.....	110.00	.37	.80	.64	.30	.90	3.80	3.50	1.62	1.62	.05	250.00	365.00	120.00	8,060
Martin Murray, Troy, N. Y.	26.00	.30	1.50	.60	.30	1.50	3.51	3.00	1.70	1.00	.06	350.00	250.00	104.00	8,045
Brown & Bowes, Cohoes, N. Y.	100.00	.25	1.00	.45	.15	1.00	3.00	1.00	.75	.75	.06	280.00	300.00	130.00	6,577

ELECTRIC LIGHTING.—York, Pa.—The secretary of the light committee writes us that the Edison Electric Light Co. has been awarded the contract at 20½ cts. a light a night for 288 2,000-c. p. lights all night and every night.

SEWER BRICK.—Cambridge, Mass.—The New England Brick Co., Boston, is reported to have submitted the lowest bid at $9.60 per 1,000 sewer brick delivered in Cambridge, for not less than 1,000. Its bid for brick delievered f. o. b. cars was $9.25 a 1,000 in lots of not less than 8,000 and delivered at wharf below the W. Boston bridge, $8.75 a 1,000. Mead, Mason & Co. bid $10.30 delivered on the cars. Fiske & Co. bid, delivered, $10.50.

DREDGING.—Newark, N.J.—J. C. Mundy, Gen. Supt. of Works, writes us that P. Sanford Ross, Jersey City, N. J., submitted the lowest bid at 85 cts. a cu. yd. for dredging in Peddie St. ditch. S. P. Harris, Newark, submitted the only other bid, at $90 a cu. yd.

IMPROVING SEWAGE DISPOSAL WORKS.—Plainfield, N. J.—The following bids were received Feb. 18 for improving the sewage disposal works, beds and appurtenances, as described in our advertising columns; Emanuel & Son bid $1.50 for cinders, and Vaughn bid $1.50 for cinders and gravel for filling; Andrew J. Gavett, Cy. Surv.; G. B. Wean, Cy. Clk., pro tem.:

Bids Received at Plainfield, N.J., Feb. 18, 1901, for Improvements to Sewage Disposal Works.

Quantities.	F. C. O'Reilley Orange, N. J.	Geo. P. Olcott, East Orange, N. J.	Gleason-Kiely Const'n Co., Syracuse, N. Y.	M. Hurley and A. B. Nelson, Trenton, N.J.	Emanuel & Son, Catasauqua, Pa.	Jehiel Vaughn, Stamford, N. Y.	John Driscoll, Orange, N. J.	A. Costa, Orange, N. J.	Richards & Gaston, Somerville, N. J.	C. M. Meeker, Plainfield.
Earth excavation . 7,000 cu. yds.	$0.30	$0.19	$0.25	$0.25	$0.18	$0.25	$0.54	$0.24	$0.20	$0.17
Filling: Stone ...14,300 " "	2.15	1.69	1.45	2.00	2.00	1.50	1.87	1.45	1.25	1.48
Slag .....14,300 " "	2.15	1.73	....	2.00	1.50	1.50	1.50	1.52	....	1.58
Concrete ..... 2,400 " "	5.00	5.45	4.25	8.00	6.00	6.00	5.00	5.10	6.50	4.88
Roof over septic tanks.....	1600.00	1990.00	1900.00	2400.00	1750.00	2000.00	1400.00	1950.00	2500.00	1400.00
Gate houses ..... 2 each...	265.00	224.00	240.00	300.00	167.00	250.00	215.00	975.00	450.00	200.00
15-in. sewer ..... 130 lin. ft..	.30	.54	.32	.60	.30	.50	.49	.30	1.00	.58
12-in. " ..... 930 " "	.35	.43	.34	.50	.30	.40	.51	.43	.55	.48
8-in. " ..... 310 " "	.13	.32	.33	.40	.30	.30	.43	.31	.55	.42
4-in. " ..... 195 " "	.08	.22	.24	.35	.20	.30	.35	.25	.50	.37
10-in. distrbtg pipe 225 " "	.16	.25	.18	.45	.15	.30	.33	.18	.20	.20
8-in. " " 505 " "	.13	.20	.13	.40	.105	.30	.28	.14	.15	.15
6-in. " " 580 " "	.10	.15	.09	.35	.075	.20	.24	.11	.10	.11
4-in. " " 1,170 " "	.07	.10	.07	.35	.06	.20	.17	.07	.07	.09
3-in. " " 1,240 " "	.06	.06	.06	.30	.05	.20	.16	.06	.06	.08
4-in. horseshoe tile10,500 each...	.03	.04	.02	.03	.035	.03	.08	.03	.03	.02
12-in. sluice gates 8 " ...	27.00	26.60	27.00	30.00	26.00	30.00	24.00	30.00	30.00	36.00
8-in. gate valves. 4 " ...	19.50	21.00	20.00	25.00	18.50	20.00	20.00	20.00	24.00	22.00
Brickwork, a cu. yd.	12.00	8.50	7.50	12.00	8.50	10.00	10.80	13.00	10.00	11.00
Bluestone. ..... 200 cu. ft...	.80	1.90	1.55	1.00	1.60	2.00	3.00	1.75	2.50	1.80
Cast iron ..... 1,950 lbs.....	.05	.03	.03	.025	.05	.015	.03	.02	.04	.03
Cement'g 24" sewr 300 lin. ft..	.75	.76	1.05	1.50	1.00	1.25	.86	1.25	2.00	.98
Total (Gleason-Kiely Co. lowest)	.....	.....	$37,076	.....	.....	.....	.....	.....	$41,349	$38,278

ASPHALT BLOCK PAVING.—Toledo, O.—We are informed that the following contract was let to C. H. Burchinal, 210 The Valentine, Toledo, Jan. 28, 1901, for asphalt block paving, 1 for labor and m for material: Greenwood Ave., grading—Sand, 2,500 yds.; cement or Berea, 2,400 yds., 1 20 cts.; Medina curb, 1,250 ft., 1 15 cts., m 35 cts.; Berea curb, 1,250 ft., 1 15 cts., m 20 cts.; resetting old curb, 10 ft., 1 1 ct.; curb stone headers, 120 ft., 1 10 cts., m 20 cts.; curb stone headers reset, 1 1 ct.; 15 and 18-in. sewer pipe., 20 ft., 1 5 cts., m 5 cts.; 12-in. sewer pipe, 50 ft., 1 40 cts., m 60 cts.; 12-in. sewer pipe, relaid, 10 ft., 1 80 cts.; 4-in. sewer pipe, 8 ft., 1 20 cts.; 4-in. soft tile, 1,280 ft., 1 2 cts., m 2 cts.; iron in place, 100 lbs., 1 1 ct., m ½ ct.; brick per M., 200, 1 15 cts., m 5 cts.; iron inlet, one, 1 $6, m $12; iron inlet reset, one, 1 $1; new catch basins, two, 1 $20, m $30; new manholes, one, 1 25 cts., m 75 cts.; extra sand, m $1.20; extra concrete, five, 1 10 cts.; m 10 cts.; common paving and team labor, 2 cts.; asphalt blocks, 1,850 yds., 1 39 cts., m $1.80; total, $5,241. C. W. McKinney was lowest on all block paving on sand, at $4,252 and $4,017, on concrete at $4,629 or $4,391. Mr. Burchinal was also awarded the contract for asphalt block paving at the same prices in Yondato and Stratton Sts., at $6,550 and $6,828 respectively, the quantities being slightly different from the Greenwood Ave. work. The other bidders were Chas. W. McKinney, The Nasby; Wm. J. & J. M. Mahon, 321 Floyd St.; Garrigan Brothers, 435 The Valentine; H. G. Jamison, 61 Produce Exchange; G. H. Cole, 425 The Valentine; The Kirlin Bros. Co., The Nasby.

BANK PROTECTION.—New Orleans, La.—Maj. H. M. Adams, U. S. Engr., New Orleans, informs us that the following bids were received Feb. 7, 1901, for constructing bank protection at Plaquemine, La., (1) being for mattress, estimated at 46,666 sq. yds., (2) for rip-rap stone, estimated at 10,500 tons: John M. Kelly, New Orleans, (1) 89 cts. a sq. yd.; (2) $3.94 a ton of 2,000 lbs.; John Short, St. Charles, Mo., (1) 57 cts.; (2) $2.58, total $53,690; Fruin-Bambrick Construction Co., St. Louis, Mo., (1) $1.33⅓, (2) 2.14¾; Hunter & Frey, Memphis, Tenn., (1) $1.17, (2) $3.10.

MISCELLANEOUS CONTRACTS.

STREET SIGNS.—Plainfield, N. J.—The council on Feb 18 voted to buy 500 street signs.

STEAMBOAT.—New York, N. Y.—Bids are asked by the department of correction, 148 East 20th St. until March 7 for constructing a new steamboat. F. J. Lantry, Comr.

PARK SUPPLIES.—New York, N. Y.—Bids are asked by the department of parks, Arsenal, Central Park, until Feb. 28 for furnishing a quantity of paints, gravel, stone screenings, top soil, etc.

QUAY WALL.—Portsmouth, N. H.—Bids are asked until March 9 for constructing 200 ft. of concrete quay wall, at the navy yard. M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept. Washington, D. C.

BEACONS.—Mobile, Ala.—Bids are asked until March 8 for erecting four new beacons, removing and re-erecting one beacon and removing two beacons in Apalachicola Bay and St. George Sound, Fla. Lieut.-Col. A.N. Damrell.

WHARF AND BEACH PROTECTION.—Ottawa, Ont.—Bids are asked until March 1 for constructing a pile wharf at Eskasoni, N. S., and for constructing a beach protection at Point Wolfe, N. B. Jos. R. Roy, Acting Secy., Dept. Pub. Wks.

OIL AND GAS DEVELOPMENT.—Wayne County, Mich.—We are informed that B. H. Rothwell, Louisville Hotel, Louisville, Ky., and Chamber of Commerce Bldg., Detroit, Mich.; Dr. Law, of Dearborn, Mich., and T. M. Morton, of Detroit, Mich., have formed a company with a capital of $150,000 to bore for oil and gas in Wayne county. In January Mr. Rothwell wished to secure the names and addresses of manufacturers of drills, engines, boilers and other apparatus for boring for oil and gas.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked until Feb. 26 for furnishing a freight elevator and a quantity of nails, rivets, rubber tubing, electric motors, iron pipe and fittings, etc., at the navy yard, Boston, Mass.; for furnishing one boiler plant, one condenser and a quantity of zinc, steel, cement, stone, etc., at the navy yard, Washington, D. C.; for furnishing a quantity of electric traveling cranes, motors, cables, rivets, iron, hardware, etc., at the navy yard, Portsmouth, N. H.; and also for a quantity of machine tools, glue pots, steam locomotives, etc., at the navy yard, Pensacola, Fla. A. S. Kenny, Paymaster-General, U. S. N.

SAN FRANCISCO, CAL.—We are informed that considerable work is now in progress at the Mare Island navy yard under the direction of R. C. Hollyday, C. E., U. S. N. Fred. Peterson is completing a permanent and substantial ferry slip. Healy & Tibbitts have just completed 500 ft. of quay wall and are now erecting a crematory after the Thackery process. The Penn Bridge Co. is putting in the foundation for a new machine shop, which will be erected for C. & R. No work is being done on the construction of the new dock, although the contractors have a considerable amount of material and plant on hand. In addition to this, three steel bindings and four coal cylinders are being constructed by the yard force; all the shop and erection work on the steel being done in the yard. Punching and shearing is done by electric-driven tools and riveting is done by compressed air.

U. S. TROPICAL POSSESSIONS.

ELECTRIC LIGHT PLANT.—Santiago-de-Cuba.—Bids are asked by the city secretary until March 1 for a new electric plant. (Postponement from Feb. 19.)

SCHOOL BUILDINGS.—Philippines.—It is stated that $400,000 is to be spent at once on new school buildings by the Civil Commission. There will also be appropriated $15,000 for maintaining a trade school. H. B. Silliman, of New York, has offered to give $10,000, gold, for the establishment of an industrial and manual training school, the money to be placed at the disposal of the Presbyterian Board of Foreign Missions of New York.

SEWERAGE AND PAVING.—Havana, Cuba.—Bids are asked until April 3 for furnishing the materials and for constructing the proposed sewerage system and street pavements, as stated in our advertising columns. Our correspondent writes us that the main points of interest in the specifications are that the bidder must deposit $500,000 as a guarantee of good faith. The contractor must give as security $1,000,000 in cash or bonds and must pay to the auxiliary government of the island $250,000 for reimbursement for expenses incurred by the government. These expenses were for payment to M. J. Dady & Co., of Brooklyn, N. Y., of the above amount to be released from all claims of said firm in regard to the contract with the Spanish government. The work must be finished in four years. The period of maintenance is for five years for the sewers and one for the pumping stations. Lt. W. J. Barden, U. S. Engr., Ch. Engr. of Havana; Alexandro Rodriquez, Mayor.

FOREIGN CONTRACTS AND EXPORT NEWS.

RAILWAY STATION.—Brussels, Belgium.—Bids are asked by M. de Rudder, 11 rue de Louvain, Brussels, until March 13, for building the Alost-Nord station, to cost $130,000.

EXTENDING HOSPITAL.—London, Eng.—Bids are asked until March 13 for extending the infirmary at St. Giles, London. E. T. Hall, Arch., 57 Moorgate St., London, E. C.

ELECTRICAL ACCESSORIES.—England.—U. S. Consul Marshal Halstead, of Birmingham, Eng., wants the names and addresses of manufacturers of electric accessories for an English electric supply company.

WHARF CRANE.—Glasgow, Scotland.—Bids are asked until March 11 for furnishing and erecting a 3-ton electric wharf crane for Princes Dock. Deposit for specifications, £1 1s. G. H. Baxter, Mech. Engr.; Trustees Clyde Navigation, 16 Robertson St.

SUGAR MACHINERY, TRAMWAY ENGINES, ETC.—Java.—F. D. Hill, U. S. Consul at Amsterdam, Holland, reports that the Koloniale Bank of Amsterdam wants prices, terms, etc., for American sugar machinery, tramway engines and materials, etc., for use in Java. Names and addresses of manufacturers are wanted at once.

COAL DISCHARGING APPARATUS.—Londonderry, Ireland.—U. S. Consul-General Westacott, at London, reports that the Secretary of the Londonderry Port and Harbor Board, Londonderry, wants the names and addresses of manufacturers of machinery and appliances for the mechanical discharge of coal from ships. Jas. Dawson, Secy.

WATER PIPE.—Soerabaya, Java.—Bids are asked until March 27 for furnishing about 3,600 tons of cast-iron socket pipe, as stated in our advertising columns. It is likely that about 7,800 tons more will be wanted during 1901 and 1902. Martinus Nyhoff, Nobelstreet 18, The Hague, Holland.

HARBOR WORK.—Rosario, Argentina.—We are informed that bids are asked until June 10, at the Argentine Legation, in London, Eng., or until July 10 at the Ministry of Public Works, Buenos Aires, for constructing the proposed harbor. Plans and specifications, in Spanish, may be seen at the office of Engineering News, 220 Broadway, New York.

LOCOMOTIVES, ETC.—India.—Bids are asked by H. Rendel, Secy., H. H. The Nizam's Guaranteed State Ry's. Co., Ltd., 50 Old Broad St., London, E. C., Eng., until March 7 for furnishing 15 "F" class locomotives and tenders; deposit, £1 1s.; and by T. Gracey, Mgr. Dir Bengal & N. W. Ry. Co., Ltd., 237 Gresham House, Old Broad St., London, until March 11 for furnishing 20 metre gage engines and tenders; deposit for plans, etc., $10.

ELECTRIC PLANTS, ETC.—Europe.—We are informed that the communal authorities of Rumelange, Luxembourg, are preparing plans for an electric plant and waterworks, bids for which will soon be asked.——Raoul Basset has secured the contract for electric lighting Champagney, France.——The council of Thilleaux, Haute Marne, France, have decided on electric lights, and a water power plant will be built.——Giacinto Motta, Civil Engr., Milan, Italy, has applied for a concession to utilize the waters of the Poglia di Valsaviore for power purposes; estimated cost, $150,000.

ELECTRIC TRAMWAY.—Vera Cruz, Mex.—Bids will soon be wanted by F. Stuart Williamson, Consult. Engr., 257 Broadway, New York, N. Y., for furnishing the materials and for the work of converting the 14 mile mule tramways owned by S. Pearson & Son, Ltd., of London and Mexico City, with an electric line. The power house will have two 300 K-W. generators, two 400-H.P. engines and boilers, and there will be at first 15 double motor cars; estimated cost, about $250,000. We are informed that work will probably proceed shortly, but the matter is held in abeyance until Sir Weetman Pearson returns from Mexico.

ELECTRIC HAULAGE FOR MINING.—Cardiff, Wales.—The Fraldu Collier Co., Ltd., Cardiff, wants plans, specifications and bids at once for a secondary electric haulage plant from the working faces to the end of the rope haulage, the latter being operated by steam. As electric haulage has not yet been successfully applied in South Wales, the company requires guarantees that the plant will be efficient, absolutely safe from danger of explosion in a gaseous atmosphere, and considerably cheaper than haulage by compressed air. The collieries are at Pontycymmer, near Bridgend, South Wales, and can be inspected by intending bidders.

TURNING LATHE, RAILS AND GAS BURNER MACHINERY.—Barcelona, Spain.—J. F. Villatta, Puertaferrisa 7 and 9, Barcelona, writes us that he wants the names and addresses of railway car wheel turning lathes, 3,000 tons of rails of 20 kgs. and of 30 kgs. per linear metre, and of the necessary accessories, and also special machinery for making burners for acetylene gaslight. Catalogues and prices f. o. b. N. Y., discounts, terms, etc., are wanted at once. It is absolutely necessary to American manufacturers in order to secure contracts for machinery in Spain, to have an agent there, as the English language is little known and it is impossible to do business by correspondence. Mr. Villatta, who writes in English, makes a specialty of importing American machinery.

RAILWAYS.—Europe.—We are informed that the provincial council of Burgos, Spain, has approved plans of Clemento Arnaiz for two narrow-gage railways, one 86 miles and the other 124 miles long.——Work on the proposed line from Ploeshti to Naleni-de-Munti, Roumania, will begin soon. Address Lucas Elefterisco, Prefect of Prahova district.——Engineer Chappius and Banker Schlumberger, of Besancon, France, will build a meter gage line 22 miles long, from Morteau to Maiche, France.——Klemensiewicz & Demuth, of Vienna, have the contract at $600,000 for building a road 12 miles long, from Goritz to Haidenschaft, Austria. There will be two tunnels and several bridges.——Bids are asked by the Prefecture of Nantes, France, until July 1 for building two narrow gage roads, 35 and 53 miles long.——Italian and French companies are considering the building of a line from Turin to Marseilles.——The Italian Mediterranean Ry. Co, Turin, will want bids for defence works on the Tanaro River, near Aunone, on the Turin-Genoa line, and for repairing the permanent way between Tortona and Voghera, on the Alexandria-Piacenza-Novi line.——The Russian Minister of Ways of Communication has applied for $7,915,000 for a railway to connect the lines of Central Asia and European Russia. The termini will be Grenburg and Tachkent.

INDUSTRIAL NOTES.

WM. B. SCAIFE & SONS, Pittsburg, have received a contract from the National Steel Co. for constructing and erecting a steel frame trestle approach at its Youngstown works.

THE GREEN FUEL ECONOMIZER CO., Matteawan, New York, have an order from the Lorraine Mfg. Co., Pawtucket, R. I., for the installation of the Green's economizer in its plant.

THE GOHEEN MFG. CO., Canton, O., has been awarded a contract by the India Office, in London, for supplying its "Carbonizing Coating" for use in Assam and on the Indian State railways.

THE STARR ENGINEERING CO., 258 Broadway, New York, are engineers for the new cold storage and ice-making plant of C. H. Brownell & Sons, Washington Court House, O., and also for the 35-ton ice plant being erected by the Crystal Plate Ice Co., Long Branch, N. J.

THE AMERICAN BRIDGE CO., New York, will furnish to Cooper & Wigand, about 2,800 tons of structural steel for the Kingsbridge Road power house on the Third Ave. R. R., New York. The Gillette-Herzog branch of the company will furnish the steel work for a large steel building to be shipped to the Montezuma Copper Co., at Nacozani, Mexico.

THE BUFF & BUFF MFG. CO., Boston, announces that it has just moved into extensive additions to its Jamaica Plain shops, which have been equipped with some of the most accurate special machines and modern machine tools of the present time. Chief among these is a longitudinal dividing machine for graduating on glass ruling fifty thousand to the inch. It has also established a new department for large astronomical instruments for special observatory uses. Its "Buff" standard transit for railway and city triangulation is now made in 8 sizes, ranging from the transit weighing 5 lbs. complete to the standard triangulation transit of 17 lbs.

THE PHILADELPHIA PNEUMATIC TOOL CO., Philadelphia, has increased its board of directors from three to six by the election of Thomas Scattergood, Julius Keller and A. L. Phillips, formerly of the Keller Tool Co. The latter company has heretofore manufactured pneumatic tools exclusively for the Philadelphia Pneumatic Tool Co., but has now been purchased by it. The same officers were re-elected: Pres., J. W. Tierney; Vice-Pres., R. T. Mickle; Secy.-Treas., J. H. Mickle. The company has recently placed orders for a number of special machine tools for its shops. It has also recently opened an office at 1 Wood St., Pittsburg, in charge of Mr. John K. Henry, and expects to open an office in Chicago at an early date. Mr. J. Wilbur Tierney, President, sailed for Europe on Feb. 6, to look after foreign connections of the company.

If you want additional help, or to procure second-hand tools, machinery, plant, etc., try a "Want" card on page XXI

If you have anything to sell or to rent, we suggest that you advertise for a few weeks on one of our "For Sale" pages XXII-XXIII

If you want bids for doing any work, or for furnishing supplies, try an advertisement on a "Proposal" page XXV-XXVIII

Supple

PERSONAL
Obituary
ENGINEER
Coming
NEW PUB
Trade P
CONSTRUC
Condens
Railway
Street a
Electric
Bridges
Buildin
Water-
Sewerag
Garbage
Streets
Manufa
Miscell
U. S. T
Foreign
Contrac
INDUSTR

Mr. Joh
of Annapo
Mr. S. F
the Maryl
Mr. He
cord St.
Mr. J.
of the Ja
Mr. Ka
centering
Mr. W.
of the Co
Mr. E.
John Mo
Capt.
married
town, O.
Mr. W
Mass., w
of that
Mr. E
R. I., w
of that
Mr. G
Superin
Co., of
Mr.
has be
ceeded
Mr.
the Ge
Wester
Mr.
urer o
succee
Mr.
tenden
quarte
Mr.
Manag
at Re
Mr.
Consu
of Ch
Mr.
Chica
succe
the c
Mr.
of th
head
Boldr
Mr
Pres
appo
quar
Dr
in N
tend
pedi
M
Eng
city
Eng
M
& I
pos
opp
M
Br
pu
ge
M
Ag
ele
M
Ar
Fa
to
R.